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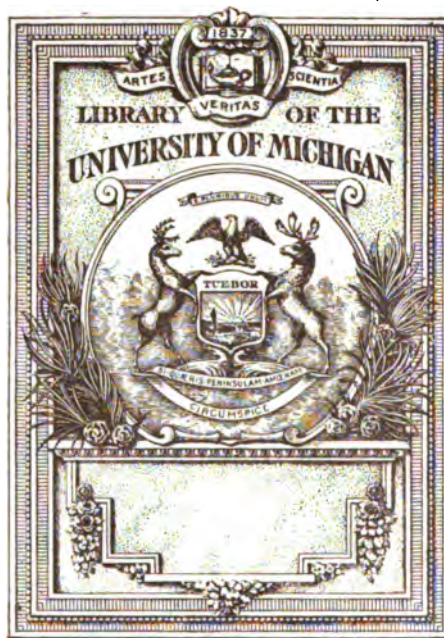
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Latin-American Year Book

FOR
INVESTORS and MERCHANTS

F O R
1920



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PREFACE.

With the present volume the Latin-American Year Book enters its third year. The fact that it has met so far with such encouraging success shows that a demand existed for a publication containing accurate and detailed information regarding the economic and financial conditions in the Latin-American countries.

There is no exaggeration in the statement that a great number of American merchants and investors have been misled by inaccurate information, only to find, after they had invested money or engaged in export or import trade, that the actual conditions were far below their expectations, and they could not obtain even a reasonable return of their capital invested. On the other hand, many investors and merchants are too timid and refuse to take advantage of wonderful opportunities simply because they have been lead to believe that all Latin-American countries are uncivilized, unreliable, and any effort to establish sound relations with them is doomed to failure. The truth is that every Latin-American country is a profitable field for American enterprise, energy and capital. The only question is where, when and how to trade with each of them. Not two of them are exactly alike, and before undertaking any kind of business, a careful survey should be made of actual conditions in the particular country with which business relations are contemplated.

The Latin-American Year Book was started three years ago for the purpose of presenting only plain, self explanatory facts and figures, giving a more exact idea of what Latin-American countries are than any description found in fantastic books, with which the American market is flooded. Our book has the most recent data as collected from the best available sources.

The 1920 edition shows many improvements over the previous ones. We have decided to include, after careful consideration, the custom tariff at least of those countries having the heaviest trade with the United States and in which no important changes are expected in the near future. We have also found it to the advantage of the American business men to include a partial list of dealers and traders in Latin-American countries. This list was made short because postal rates to most Latin-American countries are high, and long mailing lists for distribution of catalogues, circulars, etc., are absolutely undesirable.

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ARGENTINA.

The Argentine Republic, the second largest in Latin America, has an area of about 1,153,418 square miles, which is more than one third of the total area of the continental United States. Therefore, superimposed upon the United States, Argentina would cover more than the entire region east of the Mississippi, plus the State of Texas.

The country presents a great variety of climate, stretching over almost thirty-four degrees of latitude, ranging from tropical in the extreme north to almost polar in the extreme south. The larger part of the area has the climate inherent to the temperate zone.

The Argentine Republic consists of fourteen Provinces, ten Territories and one Federal District, with the area and population shown below:

Federal District, Provinces and Territories	Area in sq. miles	Population 1895 Census	Population 1915 Estimated	Pop. per sq. mile 1915
Buenos Aires (Fed. Dis.)	72	663,854	1,594,170	22.14
Buenos Aires (Province)	117,777	921,168	2,155,118	18.29
Santa Fé	50,713	397,188	922,406	18.19
Cordoba	66,912	352,223	598,545	8.95
Entre Rios	29,241	292,019	423,100	14.47
Corrientes	33,536	239,618	365,434	10.90
San Luis	29,035	81,450	126,895	4.37
Santiago del Estero	55,385	161,502	247,004	4.4
Tacuman	10,422	215,742	348,582	33.45
Mendoza	56,502	116,136	296,553	5.25
San Juan	37,865	84,251	130,412	3.44
La Rioja	37,839	69,502	104,550	2.76
Catamarca	36,800	90,161	112,955	3.07
Salta	48,302	115,015	161,150	3.34
Jujuy	14,802	49,712	73,062	4.94
Misiones (Territory)	11,511	33,163	52,603	4.57
Formosa	41,402	4,829	27,920	0.67
Chaco	52,741	10,422	49,500	0.94
Pampa Central	56,320	25,914	98,841	1.75
Neuquén	40,530	14,517	30,085	0.74
Rio Negro	79,805	9,241	37,302	0.47
Chubut	93,427	3,748	25,143	0.27
Santa Cruz	109,142	1,058	8,30	0.08
Tierra del Fuego	8,299	447	2,420	0.29
Los Andes	34,740	2,552	0.07
Total	1,153,119	3,954,911	7,979,259	6.91

The movement of population for six years is given as follows:

	Immigrants	Emigrants
1912	323,403	120,260
1913	302,047	156,829
1914	215,871	178,684
1915	45,290	73,348
1916	32,990	50,995
1917	18,143	12,565

According to the Argentine Economic Review the population of the Republic on December 31, 1917, was 8,284,266 inhabitants, as compared with 7,958,797 on the same date of 1914.

The total number of immigrants arriving in the country from 1914 to the close of 1918 was 272,568. During the same period the number of emigrants totaled 482,321, which represents a loss in population of 209,753. Adding the estimated natural increase in population since 1914, the population of the Argentine Republic at the close of 1918 was 8,411,000.

According to Government statistics published in May 1919, 213,000 more foreigners left the country during the five years ending March 31, 1919, than during the preceding five years. During the first three months of the same year 5,835 immigrants entered Argentina and 5,232 foreigners departed. The country is not believed to be in a position to absorb immigrants very rapidly at present.

The immigration in 1918 was: Passengers arrived from beyond the sea, 5,096; from Montevideo, 59,274; total, 64,370. Immigrants from overseas, 13,701; from Montevideo, 36,961; total 50,662. Of the overseas immigrants 9,188 were Spaniards, 1,076 Argentinians, 855 Italians, 761 French, 320 Portuguese, 288 Brazilians, 235 Russians, 195 from the United States, 169 English, and 614 of various nationalities.

In the census of June 1st, 1914, the last one on record, the population of Buenos Aires, the capital, was 1,560,163. On January 1, 1916, it was estimated at 1,598,571; Cordoba (1915) 135,000; Rosario (Dec. 31, 1915) 234,009; Rucuman (1915) 66,000; Mendoza, 62,000; Bahia Blanca, 75,000; Parana, 65,000; Salta 38,000; Corrientes, 30,000; La Plata (Dec. 31, 1912) 106,382; Santa Fe, 40,000; San Luis, 25,000; San Juan, 18,000.

A LAND WONDERFULLY IRRIGATED

Argentina is irrigated by a wonderful system of navigable rivers. The Plata River, one of the largest in the world, runs along the northern boundary and its tributaries drain the northern and central regions, while the southern districts are capped by smaller water-ways. It can be stated that not a square mile of Argentine territory lacks natural facilities for irrigation.

The Plata with its tributaries drains over one and a half million square miles of land. Geographically the Plata is an estuary. Its mouth is 217 miles wide, while its length is only 225 miles and the width, at the confluence of the two rivers that form it, is only 25 miles. The Uruguay which is the main

tributary of the Plata runs for about 800 miles, of which nearly 100 are easily navigable for ocean boats.

From the standpoint of climate and soil, Argentina is said to present the most nearly perfect area for the production of wheat, oats, and corn that the world contains, and this is shown by the rapid growth in the cultivated area of the country, which increased from about 13,700,000 acres in 1896, to the present total of over 60,000,000 acres, in other words, a gain of about 350 per cent. in a little more than twenty years.

At the present time, however, only about one-fifth of the productive soil has been placed under cultivation,—agriculture, therefore, is in its infancy.

POLITICAL ORGANIZATION

Juan Díaz de Solís, and Vicente Yáñez Pinzón, the Spanish explorers, discovered Argentina in 1508. Buenos Aires, the capital, was founded in 1535 by Don Pedro de Mendoza, who was sent out by the King of Spain. The population rose against the Spanish rule on May 25, 1910, and Argentina proclaimed her independence on July 9, 1816.

May 15, 1853 dates the beginning of the Constitution of the Argentine Government, with changes in the year 1866 and 1898. The President is elected every six years by electors appointed by the fourteen Provinces, equal to the number of both the senators and deputies. The legislative power is vested in a National Congress, formed by a Senate and a House of Deputies, the former numbering 30, two from the capital, elected by a special body of electors, and two from each province and elected by the legislatures, 120 in all, who are elected by the people. A deputy—the Constitution provides that there be but one for every 33,000 inhabitants—must be 25 years of age and must have been a citizen for four years. Deputies are elected for four years but one-half must retire every two years. Senators—one-third of whom are renewed every three years—must be 30 years old. Both chambers meet every year from May 1 to September 30.

The Vice-President is the Chairman of the Senate. He has no other political power. He is elected at the same time, in the same manner as the President. Both President and Vice-President cannot be re-elected; must be Argentine by birth and Roman Catholics. The President is Commander-in-Chief of the troops; appoints all civil, military and judicial officers, has the right of presentation to bishoprics, and is responsible, with the Ministry, for all acts of the Executive.

The Argentine Republic is divided into 14 Provinces, 10 Territories, and 1 Federal District (Buenos Aires). Its Constitution, with a few changes, is identical with that of the United States. The Central Government manages such matters as affect the Republic as a whole. The Governors of the various provinces in their constitutional functions are independent of the central executive. They are elected by the people of each province for a term of three and four years, and are invested with very extensive powers. The Provinces have entire control over their

own affairs. They elect their own Legislatures. Governors appointed by the President and supervise the territories. The municipal Government in Buenos Aires is exercised by a Mayor assisted by a deliberative council, the former appointed by the National Government with the approval of the Senate, and the latter elected by tax-paying inhabitants of the various city parishes. Measures relating to city finance, works, and general administration are voted on by this deliberative council and its decisions are carried out by the Executive. Constitutions of a similar nature are seen in other municipalities.

A law provided on September 26, 1919 that, in 1920, the House of Deputies would consist of 158 members, or at the rate of one member for each 49,000 inhabitants or fraction thereof not less than 16,500 inhabitants. The previous house of deputies had 120 members.

PERSONNEL OF THE GOVERNMENT

President, Dr. Hipólito Irigoyen. Elected June 12, 1916.
 Acting Vice-President, Benito Villanueva.
 Minister of Interior, Dr. Ramón Gómez.
 Minister of Foreign Affairs and Worship, Dr. Honorio J. Pueyrredon.
 Minister of Finance, Dr. Domingo F. Salaberry.
 Minister of Justice and Public Instruction, Dr. José S. Salinas.
 Minister of War, Dr. Julio Moreno.
 Minister of Navy, vacant.
 Minister of Agriculture, Ing. Alfredo Gemarchi.

MINERAL WEALTH

Argentina's chief energy and chief employment of capital have been directed to her pastoral and agricultural development. These pursuits, for which the exploitation of mines was neglected, yielded more certain and immediate returns. It is stated that if properly developed, the mineral wealth of the Republic, which is great, would produce excellent results.

Now that the mining districts, the Andine and Sud-Andine regions, are being tapped by the railway and connection by aerial cable with the railroad is practicable, the hitherto high cost of mining has been considerably reduced.

A deposit of low-grade iron containing a large percentage of manganese was recently discovered at Azul. There are large deposits of excellent building stone and granite in Argentina, but these resources, up to the present time, have been developed only on a primitive scale. One quarry employs 15,000 men, but is inadequately equipped.

The copper deposits of Northern Chile appear to extend Eastward through the Andes into the Argentine Provinces of Catamarca, La Rioja, etc. Various companies with capital running into several millions of dollars (Famatima Development Corporation, etc.), were organized and took over certain properties

that had been previously worked on a small scale. The Fama-tima Company (capital £800,000) harnessed the Ore River with electrical machinery and obtained large amounts of ore of grade 2.56 per cent. copper, 0.457 ounce gold, and 10.92 ounces silver per ton. The San Pedro mines gave a much higher percentage of copper content.

The production of tungsten ore in Argentina coincides practically in amount with the quantities exported each year, and these exports during the last few years have been as follows, in metric tons of 2,204 pounds each: 1909, 753.7 tons; 1910, 808.5; 1911, 583.8; 1912, 637.1; 1913, 535.7; 1914, 394.2; 1915, 158.2; 1916, 760.4; 1917, 986.6; and 1918, 571.6 tons.

In 1916 the United States took 693 metric tons out of the 760 exported, 34 going to France and 34 to the United Kingdom. In 1917 all of the tungsten ore went to the United States or the allied countries in Europe.

The extensive discovery of wolfram in China, Japan, and the United States had already begun to considerably upset the Argentine prices in 1918, but the signing of the armistice completed the demoralization of the market, and it has been impossible to export tungsten ore from there since, inasmuch as it will not stand the freights in competition.

The discovery of a deposit of Limonite in the Territory of Misiones, a short distance from the Brazilian frontier has been reported, assaying 50 per cent of iron.

The Argentine Constitution gives to the provincial governments the control of all mines within their respective Provinces, while the Federal Government is given control of those located in the national territories, of which those of Pampa Central, Neuquen, Rio Negro, Chubut, Santa Cruz, and Tierra del Fuego are under the Buenos Aires consular jurisdiction. All mining concessions, however, are regulated by the mining code of the Republic.

With the exception of petroleum, borate of sodium, and certain building and paving stones, practically all of the minerals or metals produced in Argentina are exported in normal times, and the comparative insignificance of the mining industry, excluding petroleum, is shown by the fact that the total exports of some 25 of such minerals and metals in 1917 amounted to only about \$1,250,000 in value, or to about one five-hundredth part of the value of the total exports of the Republic in that year. Wolfram accounted for \$846,241 of this total of \$1,250,000, coarse salt for \$274,154, mica for \$42,494 and copper for \$26,890. It is quite likely that the copper exported in 1917 may have come from the Chilean side of the Andes, where all of the valuable copper mines seem to be located. Gold has, of course, not been permitted exportation during the war, and but negligible quantities are produced.

Considerable interest is being shown in copper mining in the northwestern part of the country, and it is too early to say what will become of it. There is as yet too little mining in this country to have any effect on the mining industry abroad. But if the prospects for copper in certain of the northern Andes

wooded zone of about 40,000 hectares in the Cerillos district, Department of San Juan, Province of Córdoba.

Arrangements have been made for the experimental cultivation in the Province of Jujuy of the cinchona tree, specimens of which have been brought from the Yungas Valley, Bolivia.

With the purpose of stimulating interest in the planting and cultivation of fruit trees, the agricultural museum of the Argentine rural association organized a fruit growers' club which was to meet at intervals between November 1919 and April 1920.

According to an estimate of the department of agriculture the principal industry of the Province of Santiago del Estero is the exploitation of its forests which, in 1917 produced 1,377,447 tons of firewood, 718,389 red quebracho posts, 344,134 whites quebracho posts, and 118,731 ties.

QUEBRACHO INDUSTRY.

The chief export of the Province of Santa Fé and of the Territory of the Chaco is quebracho in logs for the extract of tannin.

Since 1914, as a direct result of the war, the export of quebracho logs had notably decreased until 1918.

The export of these logs for the entire years, 1914-1918, inclusive, has been as follows: 1914, 276,127 tons; 1915, 178,643; 1916, 101,711; 1917, 108,945, and 1918, 846,000 tons. In 8 months of 1919, it was 3,004.

The cause of the decrease has undoubtedly been the high freights for shipping such an article overseas from the beginning of 1915 to date. In 1919, when the freight rates fell considerably, the exportation of quebracho logs was nevertheless impeded by the high price for the logs in the market arising from the greatly increased consumption of quebracho wood in this country as a substitute for coal and fuel oil. The great increase in the use of the logs for making quebracho extract, has also affected the shipments of logs.

The following figures show the exports of quebracho extract from this country during the years 1914-1918:

Calendar Year	Tons
1914	88,813
1915	111,583
1916	120,010
1917	100,904
1918	124,710

Quebracho extract is produced by 18 companies operating in Argentina and Paraguay. The total River Plate production of quebracho extract for 1919 is estimated as follows in metric tons:

Companies	Maximum Tons	Minimum Tons
La Forestal Combination	174,500	122,150
Fontana (Ltd.)	12,000	10,000
International Products Co.	5,000	2,500
All others	13,000	10,000
Total	204,500	144,650

The most important company is the Forestal Land Timber & Railways Company, with a capital of 15,000,000 gold pesos which has its main offices in Buenos Aires. Other important Argentine companies having a capital of over half a million pesos are: Las Palmas del Chaco, 4,000,000 gold pesos; Anchorena Atorresagasti and Co., 1,540,000 gold pesos; Fontana (Ltd.), 1,320,000 gold pesos; United Quebrachales, 770,000 gold pesos; and La Formosa, 700,000 gold pesos.

During the last fiscal year the United Quebrachales Co., in Buenos Aires, earned 2,028,964 pesos currency.

Argentina produces 82 per cent. and Paraguay 18 per cent. of the River Plate quebracho extract. The probable supply available for 1920 ranges between a maximum of 200,000 tons and a minimum of 130,000 tons, depending on the market conditions and the instructions of La Forestal combination, a combine of the leading quebracho extract producers, which now controls about 80 per cent. of the industry.

The independent producers are in a position to sell direct to American tanners but have no stocks having sold to exporters or speculators at Buenos Aires. Their total production for 1919, exclusive of the International Products Co., was placed at 25,000 tons. American tanners have to compete with European buyers, including those in Scandinavia and Spain in addition to English, French, and Italian buyers.

The enormous demand experienced after the outbreak of the war pushed the price of quebracho extract to \$240, in gold, which led to a considerable over production. The Compañía de Quebrachales Fusiónados sold its entire 1918 production estimated at 18,000 tons to the French Government at \$127 gold.

AGRICULTURAL PRODUCTION.

Dr. Emilio Lahitte, Director of Rural Economy and Statistics, estimates that the following will be the yield of Argentine wheat, linseed, and oat crop, during the year 1919:

Provinces	Wheat Metric tons	Linseed Metric tons	Oats Metric tons
Buenos Aires	1,810,000	160,000	544,000
Santa Fé	920,000	350,000	1,400
Cordoba	1,320,000	130,000	20,000
Entre Rios	280,000	45,000	10,000
Pampa	605,000	10,000	45,000
Others	80,000	10,000	20,000
Total	5,015,000	705,000	640,000

The following table, compiled from Argentine official sources, shows areas cultivated and harvested and production of the three principal crops for the last eight years:

Year	WHEAT Area sown Hectares	OATS Area sown Hectares	LINSEED Area sown Hectares
1912-13	6,918,450	1,192,400	1,723,330
1913-14	6,573,540	1,249,300	1,779,350
1914-15	6,261,006	1,161,000	1,723,000
1915-16	6,645,000	1,038,000	1,619,000
1916-17	6,511,000	1,022,000	1,298,000
1917-18	7,234,000	1,295,000	1,308,600
1918-19	6,870,000	1,206,000	1,383,650
1919-20	6,053,000	931,000	1,425,200

A decrease, therefore, is noted in the acreage of wheat and oats, while the acreage of linseed continued to increase. Decrease was due mainly to uncertainty about prices.

Government official estimate of 1919 crops was as follows: Wheat, 5,015,000 tons, exportable surplus, 4,300,000 tons; Linseed, 705,000 tons, exportable surplus, 679,000 tons; oats, 640,000 tons.

The exportation of these crops and of corn and flour was as follows:

Year	Wheat Tons	Linseed Tons	Corn Tons	Oats Tons
1911	2,285,951	415,805	125,185	511,389
1912	2,629,956	515,399	4,835,237	896,032
1913	2,812,149	1,016,734	4,806,951	889,744
1914	980,525	841,590	3,542,280	353,700
1915	2,511,514	981,192	4,330,594	592,797
1916	2,294,876	639,914	2,873,910	804,443
1917	935,828	141,308	893,934	271,713
1918	2,943,313	391,708	622,427	517,038
1919 (9 mos.)	2,111,000	639,500	1,655,500	160,400

The exportation of hay was: 1913, 32,346 tons; 1914, 21,912 tons; 1915, 18,439 tons; 1916, 27,963 tons; 1917, 6,958 tons; 1918 (three months), 1,147 tons.

Other crops grown, but not exported to any extent, are barley, tobacco, sugar cane, cotton, peanuts, and potatoes. The area sown in barley has about doubled in the last seven years, and in potatoes, nearly tripled.

The important position of Argentina in the linseed trade was emphasized when the war limited the sources of linseed, and increased the demand for linseed oil. Enormous quantities of linseed were required to produce the oil for ship paint, camouflage material, and rain-proof equipment. A large part of these needs was met by the crops of the United States and Canada, but a still greater share was supplied from Argentine fields, where the linseed area exceeds that of any other country. The average Argentine linseed is approached only by that of British India; the United States follows with about 2,000,000 acres, and Canada with 1,000,000 acres, while Uruguay, Japan and several countries in Europe each cultivate normally from 50,000 to 100,000 acres of flax. In most of the European flax-

growing regions, however, the crop is raised for its fiber, while in North and South America, as in India, the seed is the product chiefly desired.

Under the urge of war conditions, Argentina in 1918 added 185,000 acres to the area sown to flax in 1917.

The acreage sown to peanuts and cotton in 1919 is distributed in the following proportions throughout Argentine Provinces: To peanuts, Buenos Aires, 1,483 acres; Santa Re, 37,066 acres; Córdoba, 6,178 acres; Entre Ríos, 12,355 acres; Corrientes, 15,568 acres; Tucuman, 5,683 acres; Chaco and Formosa, 2,965 acres; Rioja, Jujuy, Misiones, Chaco and Formosa, 31,061 acres; Rioja, Jujuy, Misiones, etc., 692 acres; total acreage sown, 32,680 acres.

The exposition of cotton cultivating in Argentina for 1918 held in Buenos Aires, while not of immediate importance from a commercial point of view, indicates that cotton growing has passed the first experimental stage. Ninety-three cultivators supported the exhibition, of whom 45 submitted samples, and of the later 21 were recognized in the distribution of premiums.

The samples submitted were mostly from the Territory of El Chaco, recognized as the best section for cotton growing, although Corrientes, Salta, Catamarca, and La Rioja were represented in samples and received premiums. The Texas Wood, Chaco, Dixon, Russell, Culpepper, and Simpkins, the Texas Wood being most numerous, comprised the samples of cotton.

From an agricultural standpoint, one strong advantage that Argentina possesses is that crops are spread over an extensive area. No fear is felt at any time of a total loss of the harvest owing to their being grown in regions so far distant from one another.

Argentina as an agricultural nation, now ranks seventh among the nations of the world in the production of wheat; fourth in the area of wheat sown, and second in the amount exported to other countries.

It is claimed that Argentina occupies the fifth place among the nations of the world in production of wine. The output in 1917 is said to have been 417,000,000 liters.

A conference of engineers and agriculturists is being organized in Buenos Aires to encourage the exploitation of the Northern territories of the Republic.

The Second National Agrarian Congress met in Rio Cuarto on April 17 1919, with 89 delegates present.

From July 1 to October 1, 1918, more tractors were shipped from the United States to Argentina than in the four previous years. Late in 1917 the secretary of the Argentine Agrarian League prepared a report on the use of farm tractors in Argentina, setting forth the relative advantages of power and animal plowing. The high cost of gasoline and the cheapness of pasture have always been cited by Argentine objectors to the introduction of tractors, but the investigation of the Agrarian League showed that the greater speed of the tractors and their deeper working on the soil more than compensated for the cost of the fuel in addition to the initial cost of the machines.

DIVISION OF LANDED ESTATES

Recently the Executive of the Province of Buenos Aires sent to the Provincial Legislature a bill providing for the emission of Provincial bonds to the amount of 60,000,000 pesos, the amount to be expended in the expropriation of parts of the great landed estates of which the Province is now largely formed, and the division of the land thus expropriated into small lots for the use of the small farmer. The intention of the executive is to take over property near the railroad stations in all portions of the Province, so that the problem and expense of the transportation of products need not deter the small farmer from occupying the property offered to him by the Government. One of the greatest impediments in Argentina in the way of the free agricultural development of the country, has been the system which still exists by which all the agricultural land was held by great landowners, who have consistently refused to sell their property and have, on the contrary, merely rented it out in small parcels to the small farmers. The lease of such property is always for a short term of years, rarely more than one or two years at the outside, and the tenant is never certain whether his lease will be renewed or not, or whether the terms of the lease at any rate, will not be radically changed each succeeding year. For this reason the small tenant has never become attached to his land and has never been willing to effect improvements of his own, as has consistently been the case in the development of the agricultural and farming districts of the United States and Canada. The detriment to the prosperity of the country in the nondevelopment of its resources for this reason is evident, but the influence of the great landholders, who naturally are benefited by this state of affairs, has until the present time been so great as to impede any attempts to change conditions.

The object of the bill presented in the Buenos Aires Legislature is to prevent the continuance of exactly this state of affairs. The land near the railroad stations now belonging to the landed proprietors who will not of their own accord sell it, will be divided by the Provincial Government into small lots a few hectares in size. On the lots the Government will construct at its own expense a dwelling house and a well, and will further provide the occupants of these parcels with a certain number of draft animals, and in the cases where it is desired, either seed or stock. Under the terms of the proposed law the occupant will pay down upon entering into possession of the property a certain fixed sum and in succeeding years will gradually repay the investment of the Government on easy terms and with the assurance that in bad years loans by the Government authorities will be made to him. It is further proposed that the Government will provide 50 per cent. of the necessary capital for the creation of cooperative associations, whereby the products of these properties will be purchased and disposed of, thus avoiding the present extortionate demands of the customary middle-man.

The following are the most important companies and cor-

porations, foreign and domestic, devoted to the development of lands for agricultural purposes:

Quebrachales Fusionados (Sociedad Anónima). Inc. Argentina, 1906. Office, Buenos Aires. Capital auth. and issued, \$1,750,000 (with power to increase to \$10,000,000). Debentures outstanding, \$534,500 (U. S.). Owns about 534,370 acres in Argentina and Paraguay.

Crédit Foncier Argentin (French). Capital 50 million francs. Main office, 73 Boulevard Haussmann, & Paris. Organized in 1906 for the development of Argentine resources, especially by lending money to different enterprises. The latest report of the directors, covering operations in 1916 shows unfavorable conditions caused by the war. During the year the company made new mortgage loans to the amount of 11,857,696 francs, making a total of 195,573,088 francs. The net profit of the year was 7,245,087 francs which permitted the distribution of a dividend of 11.20% on the capital stock.

La Holando Argentina. Organized in January, 1911, for the purpose of lending money on mortgages. Capital, authorized, 2,500,000 florins; paid up, 1,500,000 florins. Outstanding bonds, 6,000,000 florins. Gross receipts for 1917, 622,752 florins; operating expenses, 363,000 florins; paid 6% dividend on May, 1918.

River Plate Land and Farming Co., Ltd., British. Office, 29 Exchange Buildings, Bixteth St., Liverpool. Capital, auth. and issued, \$200,000 (U. S.).

River Plate Trust, Loan and Agency Co., Ltd. British. Office, 52 Moorgate St., London, E. C. Capital, auth. and issued, \$12,500,000 (U. S.).

Argentine Land and Investment Co., Ltd., British. Office, Palmerston House, Old Broad Street, London, E. C. Capital, auth., \$3,250,000 (U. S.); issued, \$2,701,546 (U. S.). Owns land in Buenos Aires, Santa Fé, Córdoba, and other parts of Argentina.

Argentine Northern Land Co., Ltd., British. Office, 3 St. Helen's Place, London, E. C. Capital, auth., \$2,500,000 (U. S.); issued, \$1,647,435 (U. S.).

Argentine Eastern Land Co., Ltd., British. Office, 3 St. Helen's Place, Bishopsgate, London, E. C. Capital, auth., \$1,000,000 (U. S.); issued, \$750,000 (U. S.). Owns about 8,670 acres of estancia land in Entre Rios, Argentina; 36,429 acres near Yuti station on the Central Paraguay Railway; 1,056 acres of farm in Argentina; 92 acres farm land in Paraguay, and 967 acres of township land.

Arizu Estate (Sociedad Anónima Bodegas Arizu). Office, Mendoza, Argentina. Capital, authorized, \$10,000,000 paper; issued, \$6,000,000 paper. In United States currency these two amounts represent, \$4,366,810 and \$2,620,085 respectively. Wine growers.

Development Company of Santa Fé, Ltd. Office, 149 Leadenhall St., London, E. C. Capital, auth., \$2,000,000 (U. S.); issued, \$1,779,600. Owns 416 acres of land in the Province of Santa Fé, Argentina.

Forestal Land, Timber and Railways Co., Ltd. Office, 149 Lombard St., London, E. C. Capital, auth., \$16,125,000 (U. S.); issued, \$15,458,495 (U. S.). Owns large tracts of land, forest, cattle camps, light railroads and factories in Argentina.

Guatrache Land Co., Ltd. Office, 4 Moorgate St., London, E. C. Capital, authorized, \$2,750,000 (U. S.); issued, \$838,560 (U. S.). Owns about 110,000 acres freehold land in the Pampa and Province of Buenos Aires, Argentina; also cattle raising.

Mortgage Company of the River Plate, Ltd. Office, 52 Moorgate St., London, E. C. Capital, auth., \$7,500,000 (U. S.); issued, \$6,250,000 (U. S.). Grants first mortgages on freehold only. Managed by the River Plate Trust, Loan and Agency Co., Ltd.

Domingo Tomba's Estates (Sociedad Anónima Bodegas y Viñedos Domingo Tomba). Reg. in Argentina, 1911. Capital, auth. and issued, \$3,000,000. Office, Buenos Aires. Wine concern; bodegas and vineyards.

Argentine Timber and Estates Co., Ltd., British. Office, 3 St. Helen's Place, London, E. C. Capital, auth., \$215,000; issued, \$189,250. Owns about 193 square miles freehold lumber lands at Santa Bárbara, North Argentina.

According to information supplied by the Dirección de Economía Rural y Estadística of the Agriculture Department of the

WEALTH IN CATTLE

Argentine Government, the stock of animals in the Argentine on October 1, 1918, were as follows: Cattle, 25,866,763; horses, 8,323,815; mules, 565,069; asses, 260,157; sheep, 43,225,452; goats, 4,325,280; hogs, 2,900,585. The number included under the head of cattle is made up as follows: Male and female calves without brand, 3,696,720; breed cows and female calves, marked, 11,734,520; milch cows, 2,246,115; work oxen, 739,199; total, 25,866,763.

According to recent reports, the Argentina Republic is one of the most prolific fur-bearing regions in the world, producing skins of seals, royal chinchilla, fox, guanaco, nutria, lamb, pony, weasel, and otter.

The following concern is engaged in fur industry:

"Peletería Argentina". Organized in 1909 is engaged in the manufacture of furs. Capital stock, \$350,000, Argentine money. Distributed \$32,350 Argentine money. Directors: President, Sr. Francisco J. Monasterio; Vice-President, Sr. Fernando M. Seris; Treasurer, Sr. Francisco S. Devoto. Felix C. Ocamou, Juan A. Farini Nicanor G. de Nevares, Felix Verazzi, Maximo Drago; Manager, Andrés D. Capurre.

We give below the destinations of shipments corresponding to the entire wool season of the year 1918,1919 (from 1st of October to 30th of September).—Figures in bales:

Entire wool season 1918 19	
United States	132,866
Italy	16,821
France	66,955
Spain	3,375
United Kingdom	23,740
Holland	12,093
Belgium	9,674
Various	17,542
Total	283,066

The entire wool season of 1918-1919 shows a small decrease of 5,000 bales as compared with the previous one.

There are many companies in Argentina doing business in the pastoral land and cattle raising. The following list includes only the most important of them:

Southern Patagonia Sheep Farming Co., Ltd., British. Office, 29 Great St. Helen's, London, E.C. Capital auth., \$1,250,000; issued, \$780,015. Owns sheep farming properties in Argentina and Chile.

Tierra del Fuego Development Co. (Sociedad Exploradora de Tierra del Fuego), Inc., Chile, 1892. Head office, Valparaiso. Capital, auth. and issued, \$9,000,000. Pastoral freehold lands in Chile and Argentina, 2,298,196 acres; leasehold, in Chile, 4,910,000 acres.

London and South American Investment Trust, Ltd. Registered in 1913. Capital authorized, \$5,000,000 (U.S.); issued, \$2,500,000 (U.S.)

Cordoba Land Co., Ltd. British. Office, River Plate House, 13 South Place, London, E. C. Capital authorized \$6,000,000 (U.S.); issued, \$4,392,535 (U. S.) Owns 16 square leagues of land in the Province of Cordoba, Argentina; sheep and cattle raising.

Argentine Estates of Bovril, Ltd. Registered in 1909. Office, 160 Old St., London, E.C. Capital authorized, \$3,500,000 (U. S.); issued, \$3,205,070 (U.S.). Owns a group of freehold estancias stocked with cattle; also meat preserving factories in the provinces of Entre Rios and Santa Fé, Argentina.

Argentine Southern Land Co., Ltd. Registered in 1889. Office, River Plate House, 13, South Place, London, E.C. Capital, \$1,400,000 (U. S.). In 1916 this company owned 655,940 acres of land in the National

ARGENTINA.

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Territory and Chubut, Argentina; 35,056 head of cattle, 105,8000 sheep and 3,885 horses.

Rio Negro (Argentina) Land Co., Ltd. British. Office, River Plate House, 13 South Place, London, E. C. Capital authorized and issued \$1,500,000 (U.S.). Owns about 590,000 acres; chief business, sheep raising.

South American Cattle Farms, Ltd. British. Office, Thames House, Jueen St. Place, London, E. C. Capital authorized and issued, \$2,500,000 (U. S.) Owns 10 estancias in Argentina and nine in Paraguay (about 1,100,000 acres) leased to Liebig's Extract of Meat Co., Ltd.

Tecka (Argentina) Land Co., Ltd. British. Office, River Plate House, 13 South Place, London, E. C. Capital authorized and issued, \$1,000,000 (U. S.) Owns about 383,000 acres; sheep and cattle raising in Chubut Territory.

La Co-operativa de Hacendados (Live Stock Cooperative Society), Reg. Buenos Aires, 1904. Capital authorized \$2,000,000 paper; issued \$1,760,000 paper.

Las Cavezas Estancia Co., Ltd. British. Office, Finsbury Pavement House, London, E. C. Capital authorized, \$1,000,000; issued, \$800,250. Owns cattle ranches in the Province of Entre Rios, Argentina.

La Martona Co. (Sociedad Anonima La Martona), Inc. in Argentina, 1900. Office, Buenos Aires. Capital authorized, \$1,350,000. Owns freehold cattle ranch of 15,000 acres 30 miles from Buenos Aires, and a dairy business in that city.

Estates Control, Ltd. Capital, \$1,250,000. Cattle, raw material, and investments in Bovril Argentine Estates and Virol, Ltd.

INDUSTRIES

According to an extract of the census of 1913, the principal industries are as follows:

	No. of Establish- ments	Capital	Total production	Horse Power	No. of Persons Employed
Preparing and re- fining oil	22	4,139,700	6,472,250	969	468
Manufacture of alcohol	187	9,259,876	7,915,610	1,456	1,153
Manufacture and refining sugar	44	120,130,264	140,598,360	57,511	14,685
Manuf. of beer	29	32,242,062	35,679,622	8,680	2,599
Preparat'n of meat	13	92,991,909	268,246,886	24,287	14,678
Flour mills	401	86,774,007	148,899,084	26,531	4,909
Dealing with milk	8,161	100,785,390	52,798,903	3,317	28,589
Fishing	4	4,605,400	5,686,966	17	278
Preparation of wine	4,317	182,725,984	85,291,164	14,651	16,262
Preparation of Yerba Matte	31	7,383,000	21,949,290	1,128	1,051
Saw mills	305	21,035,337	45,223,540	15,514	7,378
Extracts of tannin and preparation of firewood	493	78,146,696	41,832,714	12,874	19,616
Foundries of ore	29	20,568,870	1,752,911	79	255
Washing wool	10	1,585,250	2,443,636	885	255
Preparation of salted hides	8	161,000	494,000	55	45
Foundries and metal works	1,177	59,739,257	58,794,434	14,161	16,109
Wool mills	1,601	1,090,000	705,000	300	1,682
Cigarette fac- tories	55	31,887,959	52,874,057	1,191	4,295
Factories of cigars and preparation of tobacco	179	3,715,071	5,088,718	95	2,826
Tanneries	189	19,755,659	32,131,104	5,416	3,474
Sundries	31,624	908,938,514	846,911,461	448,922	268,947
	48,779	1,787,662,295	1,861,789,710	676,757	410,201

A modern cotton spinning factory is being started in Buenos Aires under the name of *Compania Hilandera Argentina*. This corporation was granted its charter December 1918 and has an authorized capital of 600,000 paper pesos (about \$225,000 American currency), divided into 6,000 bearer shares of 100 paper pesos each. The objects of the corporation are to cultivate and prepare textile or industrial plants (especially cotton), the working of power houses, spinning mills, weaving mills, dye works, and in general, all such operations that relate to these ends. It will manufacture 2 and 3 ply yarns, average size number 10, using cotton ring spinning machinery with a capacity of 1,000 kilos a day.

The equipment for this factory from the cotton openers to the twistors and spinners was ordered from the United States and its value amounts to \$110,000 f. o. b. New York. This is practically a new industry for Argentina and it is the first time that American cotton spinning machinery will have been brought into Argentina.

There are seven paper factories in operation in Argentina, four of which are in Buenos Aires, two in Santa Fe, and one in Cordoba. The capital invested in these factories aggregates 18,998,000 pesos, as follows: In buildings and grounds, 4,483,000; tools and machinery, 9,930,000, and in other values, 4,235,000. The paper output in kilos in 1916 and 1917 was, respectively, as follows: Wrapping paper, 13,162,605 and 5,293,231; news-print paper, 3,706,375 and 863,710; paper for books and works, 7,386,950 and 2,098,590; and paper for other uses, 14,585,804 and 2,547,807. The paper manufactured is of a fine grade, but recently considerable attention has been given to the making of news-print paper.

Under war pressure numerous small factories have been brought to life, and others extended, in Buenos Aires during the past four years. So far, however, the factories established have only advanced sufficiently to help satisfy certain local demands. The lack of domestic fuel holds back any vigorous development, not to mention the necessity for importing the greater part of the raw material. Although a considerable number of small industries have been created as a result of war conditions, the principal increase in Argentine manufactured products has been caused by the growth of plants already established, such as packing houses for meat, cheese and butter factories, leather working plants, alcohol manufacture, tanning, sugar refineries, etc. The knitting factories, of which there are not a great many, hat and shoe factories, and manufacturers of perfumery have greatly increased their business since the war.

Among the more noticeable manufacturing firms that have begun work since the war began are those making soap, candles, bronze furniture, tinware, common glass, textiles, badges, and swords for the army and navy, oils and mineral greases, colors (in small quantities) from Algarrobo (carob tree), corn glucose, casks and barrels, bread machinery, belting, bags, wooden pulleys, brick, glycerine, flags, bronze molds for wheat-paste products, paint, sheep dip, and toys to a very considerable

extent. There is also a company endeavoring to make electric lamps.

Flour milling is one of the best organized and most highly developed industries in Argentina, the total production of flour reaching nearly 1,000,000 tons per year. There are in existence about 370 mills, of which practically 70 are in the province of Santa Fé and Córdoba. Argentina is now an exporter of flour to Brazil and other countries.

The firm of Marconnetti, with a capital of 4,000,000 paper pesos, have petitioned for a concession of 300 meters of land in the port zone, with the object of constructing a large flour mill and grain elevators, the necessary legal formalities having already been fulfilled. The Provincial Government authorized the port administration to sign an ad referendum contract for a period of 10 years, renewable for a further like term. Work is to be commenced within eight days of approval of the plans, and the concessionaires have deposited the sum of \$50,000 as a guaranty that the mill will start operations during the current year. The building will be of six floors, situated on the east side of the port, and the machinery to be installed will be of the most modern type, with a capacity of 5,000 bags of flour daily. During the first year's working the number of employees and workmen occupied will be 800. The cost of the building is given as \$800,000, and in addition a "yerba" mill is to be erected, and it is the intention of the concessionaires to also build a frigorifico. The concessionaires already possess the necessary steamers and lighters for the transport of their products to all the Parana ports and to Paraguay. A similar concession is now under discussion with Senor Jose Soldano, the capital to be employed in this case being 3,000,000.

There are in the republic, according to the Argentine Ministry of Agriculture, 399 flour mills, with a productive capacity of 2,737,500 tons. They employ 5,000 people. The flour yielded represents 69.51% of the wheat and the by-products 26.43%. The loss is only 1.03 per cent. Not all the mills were working in 1917.

The Sociedad Anónima "La Clara," is one of the principal concerns engaged in this industry. Organized in December, 1904. Main office in Buenos Aires. Capital \$500,000. Owns flour mills. The report for the year ending on December 31st, 1917, shows net profit of \$91,953.59.

Work will soon be commenced in enlarging an oil refinery at San Martín, a short distance from Rosario. The enterprise is principally backed by the Anton Jurgens Margarine Works, at Nijmegen, Holland, which is reported to have a capital of \$40,000,000. A large American producer of linseed oils, which has supervised the drawing of all plans for the new buildings and equipment, is also said to be interested.

The new enterprise, which has practically unlimited backing, will probably be supervised by a branch in Buenos Aires of the American concern. All machinery and equipment has been ordered from the United States and a part has already been shipped. Operation will begin as soon as the machinery is in-

stalled, probably in a short time. Vegetable oils will be refined, the estimated capacity being between 40,000 and 50,000 tons per year.

SUGAR.

The construction of a modern sugar mill, which will be completely equipped with American machinery, the first to be installed in Argentina, commenced by the *Compañía Azucarera Concepción* of Tucuman, Argentina. A contract for the machinery, which will cost \$290,000 f. o. b. New York, was secured by the Buenos Aires branch of an American company, to be delivered September 15, 1919.

The equipment consists of a crusher, with two rolls, and four "trapiches" (mills) each having three rolls. The diameter of the crusher's rolls is 34 inches and its length, 84 inches. The diameter of the mills' rolls is 36 inches and their length, 84 inches. Two thousand tons of cane can be run in a day.

The existing mills in Argentina are all equipped with European machinery, principally from France, and much of it is obsolete. The change from Cuban, or native cane to Java cane because of the frosts in Tucuman has made necessary the installation of heavier apparatus and it is expected that several other mills in the district will follow the example of the *Compañía Azucarera Concepción* and place orders for new machinery.

The situation of the Argentine sugar market has undergone a complete change in view of the removal of all doubt regarding the result of the current harvest, because, although harvesting operations may extend until November, the absence of the dreaded frosts already insures production far in excess of home requirements until the next crop. The production of sugar in the Province of Tucuman is estimated to reach at least 200,000 metric tons, and that of other sugar-growing Provinces—Jujuy, Salta, Chaco, Corrientes—to about 50,000 metric tons. If to this total of 250,000 metric tons there be added the surplus of 40,000 metric tons of sugar imported free of duty, the country possesses an available and prospective stock of 290,000 tons for its needs during the present industrial year. As those requirements are estimated at 200,000 to 210,000 tons, there will be an eventual surplus of 80,000 to 90,000 tons.

This difference between the estimated demand and the supply caused, some time ago, a sudden fall in prices of all classes of sugar. Refined sugar in bags (crushed) fell from the then price of 7.50 paper pesos (\$3.18 American currency) net per 10 kilos (22 pounds) to the present quotation of 6.50 pesos (\$2.75 American currency); tablets have fallen from 7 pesos (\$2.97 American currency) to 6 pesos (\$2.54 American currency) per case of 10 kilos. White unrefined sugar (granulated) and first crushings have declined in price to similar extent; they are now quoted at between 5 pesos (\$2.12 American currency) per 10 kilos.

The recent Government decree prohibiting the exportation of sugar assisted the decline in quotations.

The manufacturers are now again faced with the problem

of overproduction; this problem was previously solved by exporting sugar, principally to England and Uruguay, but this solution is one to which they can not, under present circumstances, have recourse, in view of the prohibiting decree. If the prohibition is maintained, the manufacturers will necessarily have to hold the excess production of 80,000 to 90,000 tons. This means that capital amounting to 30,000,000 to 40,000,000 pesos (\$12,720,000 to \$16,960,000 American currency) will be tied up, and the markets must seek assistance from the banks, as very few of them possess capital and credit facilities adequate to finance individually so large an output by their respective mills.

One of the most important sugar producing concerns in Argentina is the corporation known as Leach's Argentine Estates, Ltd., Registered in 1912; office 8 Crosby Square, London; capital, \$1,262,500 (U. S.) The company owns about 500,000 acres.

The report issued by the board of directors at the end of 1918 contains the Profit and Loss Account to 31st March, 1918, as follows, in British money:

The Profit on Trading, less provision for Excess Profits Duty, amounted to	355,251	8	11
Add—Income from Government Securities, balance of Interest Account, and Transfer Fees	12,618	3	11
	<u>367,869</u>	<u>12</u>	<u>10</u>
From which must be deducted—			
Depreciation	32,560	0	0
Interest on Debentures, Director's Remuneration, London Charges, etc.	56,954	3	4
	<u>89,514</u>	<u>3</u>	<u>4</u>
Leaving a balance of	<u>£278,355</u>	<u>9</u>	<u>6</u>

In continuance of the conservative policy adopted with the approval of the Shareholders, the Directors added £125,000 to the Reserve Account and appropriated £38,000 as additional provision for Depreciation of Fixed Assets, leaving an available balance of £115,355 9s. 6d.

Other sugar producing companies are:

Sociedad Anónima "Azucarera Argentina", sugar manufacturers, Buenos Aires. Established, 1881. Capital, paid up, \$1,500,000 in Argentine gold. Outstanding bonds, \$1,000,000, reserves, \$150,000. Owns sugar lands and sugar mills.

Azucarera Argentina, Sociedad Anónima. Capital, paid up, \$3,000,000 gold. Sugar refiners.

Azucarera Concepción, Sociedad Anónima. Capital, paid up, \$3,000,000 gold. Sugar plantations and refineries.

Tucuman Sugar Co. (Compañía Azucarera Tucumana, Sociedad Anónima). Formed in 1895. Head office, Buenos Aires. Capital authorized, \$5,000,000 gold; issued \$4,000,000. Owns five sugar estates and factories (118,384 acres) in Argentina.

Argentine Refining Co. (Refinería Argentina, Sociedad Anónima). Formed in 1886. Office, Calle Bartolomé Mitre, 531 (altos), Buenos Aires. Capital authorized, \$3,000,000; issued, \$2,000,000. Sugar refiners and selling agents for Argentine sugar factories.

A portland cement plant is now in operation at Sierras Bayas. The plant is located at some abandoned limekilns about

NEW INDUSTRIES.

328 kilometers south of Buenos Aires. Not only does the living rock contain limestone suitable for cement, but enough chips remain from the old lime works to make partly-crushed material for 30 years to come. Suitable clay is also found at Sierras Bayas.

The practical difficulty in placing this cement on the market lay in the high freight rates prevailing in Argentina, whereas cement could be shipped from New York in normal times at only \$4 a ton. Satisfactory arrangements have been made, however, with the Southern Railway for relatively low freight rate, not only on the product of the plant, but on the coal sent up from Buenos Aires as well.

The plant is most up-to-date in every particular, notably in its complete application of the principle of transmuting the incandescent gas as it escapes from the furnace into electric power, so that no coal is used originally in the boilers.

The present price of Portland cement in Buenos Aires is \$18 to \$20 gold per barrel. It is planned to fix the first price of the product of the Argentine Cement Co. at \$12 gold. An ultimate output of 1,000,000 barrels annually is predicted. The stock company is entirely owned in the United States.

The Electric Lamp Factory in Buenos Aires has a daily capacity of 2,000 globes of the brand known as "Fiat Lux." The only imported part of these lamps is the fine wire or filament used in same.

The Argentine shoemaking industry has developed so rapidly that practically nothing but high-grade shoes are now imported. American manufacturers have the bulk of the trade in women's high-grade shoes, but are second to English makers when it comes to men's shoes. Here are good prospects of furnishing leather and shoe supplies to Argentina's growing industry as soon as it is possible for Americans to give the market the study it deserves.

The local manufacture of purses, wallets, handbags, and similar articles of leather and silk has assumed noticeable proportions. Several shops have opened for the exclusive sale of these goods, and all of the department stores and the better jewelry stores are featuring them. One of three large firms manufacturing this class of goods claims to be exporting quantities of its product to Brazil and other South American countries.

MEAT INDUSTRY.

The meat industry is the most important in Argentina.

The exportation of meat products for the last eight years is as follows:

ARGENTINA.

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Year	Frozen Meats Tons	Chilled Meats Tons	Preserved Meats Tons	Other Meats Tons	Total Tons
1911	398,221	15,096	16,127	12,120	441,564
1912	403,456	25,231	18,331	8,824	455,842
1913	391,987	34,175	13,014	3,910	443,086
1914	403,190	40,690	13,590	2,383	459,853
1915	398,116	11,703	32,514	213	442,546
1916	482,278	16,153	45,197	1,120	544,748
1917	410,455	38,995	142,153	7,613	599,216
1918	249,486	1,500	87,000	1,477	339,463

The shipments of frozen and chilled meat in the first nine months of 1919 were: Carcasses of frozen sheep and lam, 1,662,900; quarters of frozen beef, 4,586,500; quarters of chilled beef, 78,000. The shipments of chilled beef have declined considerably while those of frozen beef have increased to a greater extent.

The principal Argentine corporation in the meat business is the Sansineña Frozen Meat Co. (Compañía Sansineña de Carnes Congeladas). It was incorporated in Argentina in 1891. The authorized capital is \$6,500,000 gold; issued, \$4,500,000, gold. The company owns extensive freezing establishments both in Argentina and Uruguay.

Another company is known as the Compañía Swift Internacional, Sociedad Anónima Comercial, and was authorized by Presidential decree on June 26, 1918, for 100 years, to buy and sell real and other property, to install and administer packing houses and similar industries, to buy and sell bonds and shares of Argentina and foreign countries and to do a banking business. Its capital is 22,500,000 pesos, gold. The shares of the company are of a par value of 15 pesos, gold, each.

Other concerns devoted to the meat and dairy industries are:

British and Argentine Meat Co., Ltd. Office, Cecil House, Holborn Viaduct, London, E. C. Capital authorized, \$10,000,000; issued, \$7,263,630.

Compañía Nacional de Caseína (National Dairy Co.). Capital authorized, \$500,000 paper; issued, \$479,000 paper.

Liebig Extract of Meat Co., Ltd. Office, Thames House, Queen St. Place, London, E. C. Capital \$8,000,000. Manufacturers and shippers of South American produce. Extensive land-holdings in Argentina, Colombia and Uruguay.

At Venado Tuerto, Province of Santa Fe, a new Argentine freezing plant was opened, incorporated under the name of "Frigorífico Santafecino" operated by a Franco-Argentine syndicate.

DAIRY INDUSTRY.

Two of the newer industries based upon grazing are butter and cheese.

The following tables show the rapid change of Argentina from an importing to an exporting country with respect to cheese and its growing importance in butter exporting:

CHEESE.

Year	Exports Kilos	Imports Kilos
1913	7,342	5,045,040
1914	3,727	3,834,367
1915	6,053	3,313,959
1916	227,711	1,421,246
1917	2,728,393	312,690
1918	1,633,362	8,007

BUTTER.

1913	3,784,396	5,672
1914	3,481,657	82,694
1915	4,622,676	362
1916	5,670,948	320
1917	9,830,154	365
1918	12,159,823	not available

The production of milk and its by-products in 1918 was valued at not less than 200,000,000 pesos, national currency. This shows an enormous increase in the dairy industry of the country. In 1913 Argentina imported 5,000,000 kilos of cheese. These imports have now practically ceased, and the home production has been large enough to not only supply the domestic demand but to also furnish a considerable quantity for export. In 1913 the exports of butter were 3,800,000 kilos; of cheese, 7,300 kilos, and casein, 3,400,000 kilos, with values aggregating 6,700,000 pesos, currency. In 1919 these exports were as follows: Butter, 18,970,000 kilos, valued at 36,340,000 pesos, currency; cheese, 6,431,000 kilos, valued at 5,222,000 pesos, currency; and 3,564 kilos of casein, valued at 1,506,000 pesos, currency, or an aggregate value of the three products of 43,068,000 pesos, currency. The milk used in the manufacture of butter and cheese represents 700,000,000 liters, which is the normal production of 700,000 milk cows. In 1913, according to the third census, Argentina had 2,200,000 cows. Estimating the domestic milk consumption in 1918 as equal to or greater than that of 1913, it is logical to suppose that there has been a considerable increase in the number of cows, and that the probable number in the Republic is now about 3,000,000. Inasmuch as incomplete data from Europe indicates a loss there during the war of more than 10,000,000 cows, it would seem that the demand for Argentine dairy products is assured for many years, and all indications point to a rapid development in the future of the Argentine dairy industry.

FOREIGN TRADE.

In common with other countries of South America, Argentina exports raw material and imports manufactured articles, the latter being as yet imperfectly developed.

In considering statistics of Argentina's exports and imports, it should be borne in mind that the official statistics, until recently, were based on valuations of the commodities established without regard to actual current values. In the case of imports the values used were those established in 1906. These

statistics frequently gave rise to an erroneous impression of the varying trade balance of the country, inasmuch as the enormous rise of prices was not at all reflected in the figures of imports, while the export figures were also subject to certain revision. The Argentine Government has issued adjusted figures.

The following table shows the growth of Argentina's foreign trade:

Year	Imports	Exports
1865	\$ 29,234,354	25,212,016
1875	55,607,627	50,188,795
1885	88,994,208	80,943,332
1895	91,768,064	115,865,411
1905	197,974,016	311,544,308
1910	379,353,000	389,071,000
1911	405,020,000	342,317,000
1912	446,863,000	501,667,000
1913	496,227,000	519,156,000
1914	322,530,000	403,132,000
1915	305,388,000	582,179,000
1916	366,131,000	573,000,000
1917	380,321,000	550,170,000
1918	500,600,000	810,400,000

The values are in Argentine gold dollars.

There was a large increase in the exports to the United Kingdom during 1919, compared with 1917, due largely to shipments of wheat under the wheat convention, etc.

The return containing the values of Argentina's imports from the various countries of origin and of exports to foreign purchasers of her produce, during the year 1918, as prepared by the Director-General of Statistics, says:

"Of our total foreign commerce during 1918 (amounting to \$1,302,000,000 gold, or say \$2,959,000,000 m.n.), one third part (33.1 per cent.) was with Great Britain. The next two countries in order of importance were the United States of America (25.7 per cent.) and France (10.7 per cent.). Brazil (6.3 per cent) occupies the fourth position on our list of customers, our trade with that country having been larger in value than with either Spain (5 per ct.) or Italy (4.6 per ct.). Our commercial intercourse with Uruguay, Japan, Chile and Paraguay—1.5; 1.4; 1.3; and 1 per cent respectively—has considerably increased. The ten countries mentioned accounted for 90 per cent. of our total foreign trade.

"The past five years have produced an appreciable augmentation in the value of our commerce with South American countries. In 1913 the portion of our trade was 5.6 per cent. of the whole; in 1918 it had risen to 11 per cent.

"Notwithstanding the value of our imports in 1918 (\$500,000,000 gold), they were in quantity smaller than in any of the fifteen preceding years. Their quantity was slightly over one-third of the quantity imported in 1913, the aggregate value being approximately unchanged. As I have pointed out in previous Reports, this is explained by the great rise in prices, which have trebled (in 1918 there was, in the aggregate a rise of 194 per cent. as compared with 1910).

"A similar conclusion is arrived at from an examination

of our trade with each country: even commodities which, from 1915 to 1917, did not vary in price to an important extent, rose considerably last year ("yerba mate", coffee, cocoa, etc.).

"The largest trade balances in our favor derive from our commerce with the following countries: United Kingdom, \$181,000,000 gold; France, \$87,000,000 gold; Italy, \$20,000,000 gold; Uruguay, \$10,000,000 gold.

"Balances against this country resulted from our trade with: Spain, \$18,000,000 gold; Brazil \$16,000,000 gold; Japan, \$12,000,000 gold; British Possessions, \$6,000,000 gold; and Peru, \$3,600,000 gold."

The real values of foreign trade, by countries, during 1918, were:

Countries	Imports (Real value in \$ gold)	Exports	Total	Percentage
U. S. Kingdom	125,000,000	305,800,000	430,800,000	33.1
U. S. America	169,500,000	165,100,000	334,600,000	25.7
France	26,000,000	113,000,000	139,000,000	10.7
Brazil	49,400,000	33,300,000	82,700,000	6.3
Spain	41,800,000	23,800,000	65,600,000	5.0
Italy	20,000,000	40,200,000	60,200,000	4.6
Uruguay	4,500,000	15,000,000	19,500,000	1.5
Japan	15,200,000	2,800,000	18,000,000	1.4
Chile	8,300,000	8,600,000	16,900,000	1.3
Paraguay	7,300,000	5,200,000	12,500,000	1.0
Sweden	3,300,000	4,400,000	7,700,000	0.6
South Africa	1,900,000	4,900,000	6,800,000	0.5
Mexico	5,250,000	50,000	5,400,000	0.4
Norway	900,000	4,200,000	5,100,000	0.4
Peru	4,000,000	300,000	4,300,000	0.3
Cuba	3,200,000	300,000	3,500,000	0.3
Switzerland	3,200,000	20,000	3,220,000	0.2
Other countries and "orders"	11,750,000	74,430,000	86,180,000	6.4
Totals	500,600,000	801,400,000	1,302,000,000	100

The real value of imports into Argentina in the first half of 1919 was:

Live animals	497,015
Of animal origin	1,568,309
Fruits	1,148,505
Spices and condiments (including sugar and culinary oils)	29,826,933
Vegetables and cereals (inc. rice, malt, etc.)	4,053,667
Substances for infusions and hot beverages (including coffee, tea, and yerba mate)	11,101,572
Flour, pastes, and other alimentary products	296,991
Tobacco and its manufactures	4,140,114
Wines	1,938,222
Spirituos liquors	1,300,941
Other beverages	260,999
Textile materials and their artifacts:	
Silk	5,523,207
Wool	13,719,063
Cotton	44,249,849
Other textile fibres (including sackings, meat containers, etc.)	34,457,955
Oils (fixed, mineral, volatile, medicinal) and greases (including kerosene, naphtha, petroleum, etc.)	15,938,196

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Chemical and pharmaceutical substances and products	14,843,144
Colours and dyes	2,366,592
Wood, woody substances, and their manufactures:	
Raw and slightly worked	9,837,678
Manufactures	1,359,208
Paper and cardboard	8,348,485
Paper goods	617,732
Leather and its manufactures	1,543,131
Iron, raw and slightly manufactured	10,573,928
Iron and steel goods	12,232,647
Other metals and their manufacture:	
Raw and partly manufactured	7,259,815
Artifacts	4,867,391
Agriculture	5,620,458
Stones, earthy substances, glassware and ceramic products:	
Raw and partly manufactured (including coal)	17,682,880
Manufactures	2,073,769
Electrical materials	2,879,756
Various articles and manufactures	9,388,964
Total	281,508,090

The values of the Exports, grouped under the four headings: "Cattle Products", "Agricultural Products", and "Forestal" and "Other Products" during the first half of 1919 was:

Cattle	227,082,452
Agricultural	100,537,912
Forestal	7,557,071
Other products	6,652,447
Total	341,829,883

TRADE WITH THE UNITED STATES

The following list shows the goods exports, sent by Argentina to the United States during the year 1918:

Antimony, ore, \$44,194; Blood, dried, bones, hoofs and horns, unmanufactured, \$992,468; Breadstuffs, \$2,487,114; Broom corn, \$357,386; Chemicals, drugs, dyes, and medicines, \$6,151,454; Cocoa, or cacao, crude coffee, \$266,354.

Copper, \$11,745; Dyewoods, in a crude state, \$32,909; Feathers, \$52,468; Fertilizers, \$569,287; Fibers, vegetable, and textile greases, and manufactures of, \$6,973; Fruits and nuts, \$34,376; Furs, and manufactures of, \$2,702,004; Gold and silver, manufactures of, including jewelry, \$224; Grease and oils, n.e.s., \$161,941; Hair, unmanufactured, \$763,520; Hides and skins (except fur skins, raw or uncured, \$35,459,834; Household and personal effects, and wearing apparel in use, etc., \$8,000; India rubber and substitutes for, unmanufactured, \$342,697.

Iron and steel, manufactures of, \$9,923; Leather and tanned skins, and manufactures of, \$3,423; Manganese, oxide and ore of, \$40,023; Meat and dairy products, \$19,641,867; Mica, \$35,245; Oil cake, \$5,043; Oils, \$133,663; Oleostearin, \$931,702.

Paper stock, crude (except wood pulp), \$430; Paper, and manufactures of, \$605; Seeds, \$17,557,994; Spirits, wines, and liquors: Beverages, \$3,697; Starch, \$5,771; Tanning materials, crude, \$348,671; Tungsten-bearing ore, \$371,227; Vegetables, \$383,633; Waste, n.e.s., \$13,803; Wax, beeswax, \$13,324; Wool, etc., unmanufactured, \$104,313,192; Zinc ore and calamine, zinc contents, \$2,559.

The following list covers the goods sent from the United States into Argentina in 1918:

Animals, \$5,100; Agricultural implements, \$2,509,114; Art works, \$3,039; Asbestos, manufacture of, \$60,570; Asphaltum, manufactures of, \$8,758; Athletic and sporting goods, \$30,968; Babblitt metal, \$32,002; Billiard tables and accessories, \$13,239; Bicycles, tricycles, etc., \$74,232; Breadstuffs, \$142,912; Blacking (including shoe paste, etc.), \$116,406; Brushes, \$225; Buttons, and parts of, \$107,082; Candles, \$38,557; Celluloid and manufactures of, \$92,829; Cement, hydraulic, \$402,442; Chewing gum, \$2,256; Cocoa and chocolate, prepared or manufactured (not including confectionery), \$30,868; Coffee, \$21,278; Confectionery, \$13,536; Cork, manufacture of, \$50,338; Cars, automobiles, and other vehicles, \$5,622,508; Chemicals, drugs, dyes and medicines, \$4,588,532; Clocks, \$204,804; Coal, \$1,459,582; Copper, \$214,325; Cotton, \$17,534,933; Dental goods, \$65,981; Earthen, stone and chinaware, \$2,829,382; Explosives, \$280,878; Eggs, \$36; Fibers, vegetable, manufactures of, \$4,129,540; Fish, \$340,116; Fruits and nuts, \$507,221; Flavoring extracts and fruit juices, \$15,245; Furniture of metal, \$36,002; Furs and fur skins, \$226,375; Glass and glassware, \$705,935; Glucose and grape sugar, \$115,450; Glue, \$10,035; Gold and silver, manufactures of, \$96,870; Grease, \$121,104; Hair, animal, and manufactures of, \$2,637; Hats and material for, \$62,441; Hops, \$94,684; Hardware, \$20,972,574; Household and personal effects, \$28,812; India rubber, manufactures of, \$2,263,173; Ink, \$202,969; Instruments and apparatus for scientific purposes, \$176,879; Iron and steel, \$8,088,891; Leather, \$1,614,588; Lamps, chandeliers, etc., \$195,090; Meat and dairy products, \$356,200; Oils, \$9,466,798; Paints, pigments, colors, and varnishes, \$1,163,568; Paper, \$3,893,874; Photographic goods, \$538,874; Quicksilver, \$51; Refrigerators, \$31,048; Roofing felt and similar materials, \$21,291; Seeds, \$116,109; Silk, artificial, manufactures of, \$592,644; Soap, \$268,943; Spirits, wines, malt liquors, and other beverages, \$16,421; Sponges, \$23,109; Starch, \$2,878; Stationery, \$182,594; Straw and palm leaf, manufactures of, \$57,480; Sugar, refined, \$6,483,692; Surgical appliances (not including instruments), \$85,520; Suspenders and garters, \$109,993; Tin in pigs, bars, etc., \$10,919; Tobacco, unmanufactured, leaf, \$341,006; Toys, \$85,186; Trunks, valises, and traveling bags, \$4,322; Typewriter ribbons, \$28,844; Umbrellas and parasols, \$5,517; Vegetables, \$110,707; Vulcanized fiber and manufactures of, \$5,778; Wall board (substitute for plaster), \$15,054; Wax, manufactures of, \$3,213; Wood, \$2,741,691; Furniture, \$91,943; Wool, manufactures of, \$806,541.

JAPAN ENTERS ARGENTINE MARKETS.

A few years ago the Japanese trader was scarcely known and little talked of in the Buenos Aires market, but to-day the energetic representatives of the land of the Mikado constitute a fairly large and constantly increasing group. Japanese merchandise is brought direct to this port by the steamers of the two Japanese steamship lines, the Nippon Yusen Kaisha and the Osaka Shosen Kaisha. Japanese merchants do their banking business through the recently established branch of the Yokohama Specie Bank, and they have formed a Japanese Chamber of Commerce here, which institution is now a member of the Interallied Chamber of Commerce.

Imports into Argentina from Japan in 1917 were 300 per cent. above those of 1910, and amounted to \$3,203,081. Exports from Argentina to Japan were practically nil prior to 1917, when they were valued at \$2,036,725. Ten Japanese vessels arrived here in 1917, as compared with one in 1912.

The Japanese are actively pushing their trade in drugs and chemicals, for which they have taken good-sized orders, and

have already made important deliveries. They offer a good variety of spices and should be able to work up a lucrative business in them.

The National Grape Growers' Association of the Argentine Republic has taken steps to secure the use of Government transports for shipments of wine to Brazil. Investigations show that Brazil offers an excellent market at the present time for Argentine wines.

AUTOMOBILES.

The total of Argentine imports of motor cars, both passenger and commercial vehicles, for the years 1911-1916, inclusive, were as follows:

	Number		Number	
1911	2,461	1914	2,185	
1912	4,281	1915	1,847	
1913	5,115	1916	5,929	

In 1911, the majority of the imports were expensive foreign cars.

The greatest opportunity in Argentina, so far as the manufacturer of passenger cars is concerned, apparently belongs to the quantity producer of good, light, and inexpensive machines.

The great market for such vehicles lies away from the cities in the vast outlying districts. The field is one particularly suited to the American product, which dominates this market, as it exists today and should continue to do so in the future. Almost no European cars have been sold outside of the good-road centers, while it is said that more than 80 per cent. of the imports from the United States are now going to wealthy farmers and others in the country regions.

WIND MILLS.

The demand for windmills in Argentina is probably greater in proportion to the number of inhabitants than in any other part of the world, not even excepting the Netherlands. Some of the larger houses sell 450 complete mills and towers a month. Practically all of these mills which are invariably of steel, come from the United States, scarcely any being of Argentine manufacture. The demand is for 6, 8, 10, and 12 foot mills. The length of the stroke usually required is 8 inches; a longer stroke than 9 inches is not much in request.

Several hundred mills are sold annually in the vicinity of Buenos Aires, Rosario and its suburbs, and in all other cities and towns throughout the country. Few municipalities have their own water-works systems, which accounts for the wide use of windmills. On the large estates and cattle ranches there are often more than a dozen windmills. These are at work practically all year pumping water for the cattle, and there is a continued demand for small repairs and new parts.

The machine offered should not require too much attention and should be so constructed that the gears run in a housing

containing sufficient oil for at least 12 months. Strong winds are usual throughout the year in Argentina. The maximum wind velocity during storms is 74 miles per hour and the average wind velocity, about 18 miles per hour. Towers of the four-post type should range in freight from 20 to 60 feet. Eight and 10 foot mills and 20 to 40 foot towers are chiefly in demand. Every type of handlift force windmill, belted power, and even direct connected pumps are salable in Argentina. They are used in dug, drilled, and driven wells. Direct connected gasoline engines and power pumps also find a ready sale, but among power pumps the belted types are the more popular.

At the present time and perhaps for the immediate future, Argentina offers the best market in South America for electrical goods, owing to the fact that it is capable of easy development and produces articles of such prime necessity throughout the world as grain, wool, and beef. It is expected that its progress will be more rapid than that of other countries that have more difficult transportation and production of problems, and its point of maximum ability to absorb electrical goods will be reached while Brazil is still in the early stages of its development.

PAINTS AND COLORS.

In 1913, the total import of paint into Argentina reached 28,043,614 pounds, worth \$1,888,181; in 1916, they amounted to 20,111,740 pounds, worth \$1,280,715; in 1917, 15,655,843 pounds, worth \$1,257,329.

While Argentine imports of paint from the United States have increased during war years, there has been a great reduction in the total imports of paint. With the increase in the local manufacture of linseed oil, there is a decrease in the demand for ready-mixed paints, raw materials being imported for the five paint factories in Argentina that turn out a satisfactory quality of cheap and medium class paints, two producing dry colors that compare favorably with the American product. The locally ground colors in oil are less liked than the imported preparation, though the duty and freight on liquids restrict the imports of liquid paints.

The qualities of paint demanded in Argentina are either very good or very common. Enamel paint should be much heavier for Argentina than that prepared by American manufacturers for the usual domestic market. A high-grade of enamel is in demand for exterior as well as interior work, as the cheaper grades of enamel are produced in local factories.

The city of Buenos Aires, furnishes a market for about 400 metric tons of calcium carbide per month, which is approximately 80 per cent. of the entire importation of this product into Argentina.

CUSTOM REGULATIONS.

The following information about preparation of consular papers for shipments to Argentina will be of value to American shippers: -

Shipments to Argentina do not require consular invoices but must be accompanied by a bill of lading in triplicate, the fee for legalizing which is \$2 for the set and 50 cents each for extra copy. Merchandise of small quantity and value may be sent by parcel post. The bill of lading for a shipment of merchandise must be accompanied by a certificate of origin in triplicate (which forms part of the bill of lading and for the legalization of which no charge is made) specifying marks, numbers and kind of packages, class of merchandise, weight (gross or net) and country of origin of the merchandise. A certificate of origin is not required with a parcel receipt. The value of merchandise must be given to the steamship companies for inclusion in their manifests.

Packages should bear shipping marks, numbers, and name of steamer on two adjacent sides, and marking of gross and net weights on packages is advisable. Labels on containers of animal products must give name or product, weight of contents, name of manufacturer, place of origin, and date of manufacture. Consignments of crude petroleum must be accompanied by legalized certificates of origin, giving the region or district of production. The sanitary origin of potatoes and their healthy condition must be attested to by a certificate which is vised by an Argentine consul at a cost of \$2.

Argentina has consular offices in the following cities: Apalachicola, Fla.; Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Mobile, Ala.; New Orleans, La.; New York, N. Y. Norfolk, Va.; Newport News, Va.; Pascagoula, Miss.; Pensacola, Fla.; Philadelphia, Pa.; Port Arthur, Tex.; St. Louis, Mo.; San Francisco, Cal.; Savannah, Ga. Tacoma, Wash.

TARIFF.

Maximum tariff is represented by an additional 50 per cent. on duties established in the regular tariff and by 15 per cent. on free articles.

The duties as determined in the ordinary tariff are the minimum for merchandise or products of any nation that applies same tariff without additional charges to exports from Argentina; that places no duty on free articles and does not place a smaller duty on similar articles of any other origin and does not place obstacles to the importation of Argentine products by means of restrictive measures.

Any article not mentioned in this tariff and not placed on the free list, pays a general duty of 25 per cent. on its value as declared by the importer.

The president of the republic has the power to grant a special reduction of no more than 50 per cent. on the duties as determined by the tariff on articles from such countries as in his opinion offers similar advantages to Argentine products. Such a concession is to run for a determined period and can be revoked by the president six months after notice of cancellation is given.

Duties, unless otherwise stated, are ad-valorem, but values are not actual. In order to figure percentages, certain values

as fixed by the government are taken as a basis. As these values are determined long ago, they are considerably lower than actual market prices in the United States.

Brandies—grape and sugar-cane, not exceeding 79° per liter, in barrels or demijohns, \$.06. Brandies—in bottles or demijohns of about $\frac{1}{2}$ litre bottle, \$.25.

Absinthe—in barrels or demijohns not exceeding 68° per litre, \$.29; Anise—seed brandy-cognac, rum and others, in barrels or demijohns not exceeding 50° per litre, \$.28. Bitters—Angostura, up to 68° in bottles of about $\frac{1}{2}$ litre, \$.54; Bitters—bottles of other marks, \$.27; Bitters—up to 78°, \$.29; Cane—bottles, \$.25; Cane—barrels or demijohns, \$.20; Ale in barrels, \$.07; Ale in bottles, \$.10; Chacoli in bottles, \$.08; Chacoli in barrels, \$.04; Chicha in bottles, \$.10; Chicha in barrels, \$.08; Gin—in bottles not exceeding 50° per litre, \$.33; Gin—in barrels or demijohns, \$.23; Ginger and beverages with soda in bottles, \$.50; Grapa in bottles, \$.25; Grapa in barrels or demijohns, \$.20; Cider in barrels, \$.10.

Soda water, \$.40. Syrup and cider in bottles, \$.15; Liquors in bottles not exceeding 50° per litre, \$.33; Liquors in barrels or demijohns, equal degree, \$.29; Punch in bottles, \$.10.

Wines—port, sherry, madeira, rhin, chateau-margaux, lafitte, chateau iguem, borgona and other fine wines in barrels or demijohns, \$.25; Moscato, marsala, nebiolo, barolo, sauterne, mosela and other sweet and regular wines, \$.12; Wines in general, in bottles, \$.25. Vinegar in barrels or demijohns, \$.15; Vinegar in bottles, \$.02; Vermouth in barrels or demijohns, \$.15; Vermouth in bottles, \$.16;

Must, alcoholized or concentrated and drink made of wine, water or sugar, \$1.00; Whiskey in bottles or in barrels or demijohns which does not exceed 50°, \$.30.

Vegetable oil in general and linseed-oil, crude or boiled, \$.10. Coconut or palm-tree oil, \$.03; Olives in oil, filled or not, including the container, \$.08; Pickled olives, \$.05; Olives, pressed or not, \$.03; Garlic, \$.01; Caper in glass-contained, \$.08; Caper in wood-container, \$.06; Almonds without shells, \$.10; Almonds with shells, \$.05; Starch in general, \$.08. Bird-seed, \$.01; Lupine in grains, \$.01; Lupine in seeds, \$.06; Spanish beans in grain, \$.01.

Herring, smoked, in kegs, \$.05; Herring in boxes, \$.08; Rice unhulled, \$.05; Rice, hulled, \$.02; Filberts, unshelled, \$.03; Filberts, shelled, \$.05; Oats in grain, \$.01 $\frac{1}{2}$.

Sugar, unrefined, 96° or over, \$.07 $\frac{1}{5}$; less than 96°, \$.05 $\frac{1}{5}$ (Duties on sugar change from year to year according to an act of February, 1912. The president has the power to reduce the duty whenever the price in the produce exchange exceeds \$4.10 per 10 kilos but the president has not the power to reduce the duties to less than \$7.05 respectively).

Cod-fish and other similar fish, \$.04. Cod-fish, minced, \$.06; Biscuits and crackers, \$.06; Cocoa with oats and similar grains, \$.25; Coffee in grains, \$.03; ground with chicory, \$.02; (in packages \$.03); Malt, \$.08; Shrimps, dry, \$.12 $\frac{1}{2}$; Cinnamon, \$.05. Calcium carbide, \$.03; Salted meat in barrels, \$.25; Chestnuts, shelled, \$.05; unshelled, \$.05; Caviar, \$.40; Barley, hulled, \$.25; unhulled, \$.75; Onions, rye, green peas, white peas and lentils, \$.01.

Chocolate in cakes, \$.30; in powder, \$.35; Cloves and clover flowers, \$.06; Prunes, \$.08; Coconuts, \$.03 (Brazilian or Paraguayan, \$.10 ad valorem); Bon-bons and caramels, \$.25.

Preserved vegetables, \$.12; Preserved fish, except sardines, \$.20; Preserved meat, unsalted, \$.20; Dates in bulk, \$.06; in packages of less than two kilos each, \$.10; Candies, \$.06; Sausages, \$.25; Pickles in bottles, \$.10; in other containers, \$.07; Spices of all kinds, ground, \$.12; Spaghetti, \$.04; Spanish peas, \$.04; Flour, except wheat or corn, \$.05; Herbs, manufactured, \$.04; raw, \$.15; Dry figs, \$.03; when contained in packages of two kilos, \$.05; Eggs, \$.02; Ham, \$.25.

Condensed milk, \$.07; Cod-fish tongue, \$.10; Peanuts, \$.01 $\frac{1}{2}$; Butter, \$.10; Lard, \$.08. Apples, pears and dry cherries, including packing, \$.05; Ginger, \$.02; Massicot, \$.03. Honey, \$.03; Mustard, \$.10; Millet, \$.05; Nuts, \$.03. Oysters, \$.04; Raisins, \$.10; in packages of less than two kilos, \$.15; Anchovy paste, \$.30; Tomatoe paste, \$.05; Fish, pressed, \$.04; Mongo peppers, \$.03; Pepper in grain, \$.04; Kernel nuts, \$.06; Kidney beans, \$.125; Cheese, \$.20.

Salt in stone, \$.20 per hectolitre; ground in barrels or bags, \$.01 per kilo; in bottles, \$.02.
English sauce, \$.15; Sardines in cans, \$.05; Simola, \$.02; Prepared soups, \$.10; Tea, \$.20; Ticholas, \$.15; Bacon, \$.20; Truffles, \$.75.

Dry Goods.

Articles of any cloth or texture; finished or half finished clothing; fine insertions of silk or mixture; fine insertions of thread; stockings of the same kind; laces and cords of silk or mixture, 40% ad-valorem. Blankets of wool or mixed with warp of cotton, hemmed or fringed, 35% ad-avalorem.

Specific duties are paid as follows:

Collars, cotton or thread, \$1.25.
Felt, adhesive, for men's hats, \$.30.
Felt, non-adhesive, for men's and women's hats, \$.50.
Cuffs, cotton or thread, \$.20.

Skins and Furs.

Portmanteaus, chests, purses of leather of more than 25 centimeters with or without utilities; small leather wine-bags, ready-made or prepared, tanned leather and skins, 40% ad-valorem.

Drugs.

Perfumeries in general, borax, 50% ad-valorem. White-lead, tartaric and citric acid, ammonia anhydrous of cylinders, metallic antimony, pulverized baryta or impure sulphur of barita, black or tar of pit-coal; pitch mineral, cocoa in grain, sesquisulfuro of phosphorus, sulphate of lime, sulphate of copper, 10% ad-valorem. Fat oils for painting ship's bottom, saffron, mercury, sulphur, rough in stone, bisulphite of impure sodium, cascarrilla bark of cocoa, native india-rubber, barks of quillay, extracts of tannin of 25 to 30 degrees Beaume with exception of extract of quebracho and cebil, ferret lace of fibre, gelatine for the manufacture of preserved meat, nitrate of rough potassium, fish of resin, soda, carbonate, ashes, silicate industrial, nitrate and impure sulphate, unsalted and caustic soda, impure sulphate of aluminum, 5% ad-valorem.

Specific duties are paid as follows:

Stearine, \$.08.
Phosphorous of wax, stearine or any other substance, minerals, \$1.60.
Phosphorous of wax, stearine or any other substance in smaller boxes of six dozens, \$.80.
Stearine candles, paraffin and its mixtures, \$.10.

Electrical and Lighting Articles.

Carbon for arc lamps, 35% ad-valorem; Wires or cables of more than five millimeters in diameter for electricity, 5% ad-valorem.

Specific duties are paid as follows:

Matches, \$.40.
Matches, wood, wax, stearine or any other substance, \$1.60.
The same in boxes of no more than six dozens, \$.80.
Stearine candles, paraffine and its mixtures, \$.10.

Printing and Lithographic Goods.

Chromolithographs, printings in general, in colors, on card-boards or paper, labels of all kinds, commercial printings, bills of exchange, checks, drafts, stocks, stamps, letters of credit, invoices, memorandums, guides, etc.; envelopes of all kinds, printed cards, engraving and lithographing, 40% ad-valorem; cloth especially for binding, 10% ad-valorem.

Specific duties are paid as follows:

Playing cards in general, \$.10.
Paper, \$.08.
Common paper and newsprint, in rolls and reams, \$.02.
Writing paper of all kinds, \$.04.

Steel and Metal Products.

Boxes of iron and steel in general, 40% ad-valorem. Screws, knives, and nut screws of iron, 35% ad-valorem; iron bars, slabs and small plates, 20% ad-valorem; tin bars or ingots, 10% ad-valorem; iron and steel barbed wire for fencing purposes; wires of steel or iron, galvanized or not, up to number 14 inclusive; wires of pure copper, of less than 5 m/m in thickness; needles for sewing-machines, soft iron in bars, hoops or plates, without manufacturing; iron ingots, for casting; tin plate, without manufacturing, short or not; lead plates, ingots or bars; tracks and iron bars for ploughing; pieces of iron for bridges and drains; zinc ingots and bars; plain zinc up to number 4 cut for containers, 5% ad-valorem.

The points of Paris will pay specific duties at value of \$0.25 per kilogram.

Jewelry.

Jewels; precious stones; pocket-watches of gold, silver, plaque, coated in gold and common metals, articles of gold or silver, 5% ad-valorem.

Machinery.

Machines in general and extra parts for same, sewing machines and extra parts for same, shearing machines, with or without motor, and extra parts; machines with or without motors, for agriculture and extra parts for same; calculating machines and registers, Champion system machines for road building, and extra parts; machines and pipe systems for public sewers and water works, or gas and electricity lighting plants; motors or locomoviles, tricycles and parts, % ad-valorem.

Furniture.

Furniture, complete and in parts, 40% ad-valorem; oak, cedar, pine, white and candlewood, without planing, 15% ad-valorem.

Raw materials, manufactured or not.

Corks in general, manufactured or not, 25% ad-valorem; Tar of pit-coal in general, grease for tanners, including containers; makt, including container; wicks, braided or not, for candles, 10% ad-valorem; natural cotton, with or without seeds; India-rubber, natural; laces in fibres, pulp for the manufacture of paper, fine wool or linen for loom, humulus lupulus, including the container; yarn for manufacturing matches, 5% ad-valorem.

Hats.

Except those included in Hat or bonnets, 40%—The following list of specific duties:

Hats of felt, of wool in general for men and boys, \$.35.
Hats of nutria hair, beaver, rabbit hair, \$1.00.
Silk hats, glossy for coachmen, \$.70.
Silk hats in general, \$2.00.
All other hats and caps, 40% ad-valorem.

Cigars in wooden boxes.

Up to 3 kilograms		\$0.01
From 3 to 5½ kilograms		.03
" 5½ to 6½ "		.03
" 6½ to 8½ "		.04
" 8½ to 10 "		.06
" 10 to 12 "		.07
" 12 to 14 "		.08
" 14 to 16 "		.10
" 16 to 18 "		.12
" 18 to 25 "		.18
" 25 to 30 "		.25

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Cigarettes in packages or boxes.

Tobaccos, Havana, Java, Philippine, Span-

From 15 to 25 grammes	\$.10
" 25 to 35 "	.15
" 35 to 45 "	.20
" 45 to 55 "	.25
For each five grammes that exceeds 55	.05

Cigarettes, Loose.

Each 15 grammes or fraction	\$.07
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Manufactured tobacco.

Up to 15 grames	\$.07
Black tobacco of Brazil, North-American	
or English, in tables or stains	\$1.50
ish and North-American and English	
tobaccos not specified before	\$4.00

Fabrics.

Fabrics of points, 35% ad-valorem; Fabrics of wool in general, with or without mixture, 30% ad-valorem; fabrics of raw cotton, 20% ad-valorem; fabrics of special silk for sifting, 15% ad-valorem.

Shoe-wear.

Footwear in general, complete or in parts, 40% ad-valorem.

ARTICLES FREE OF DUTY.

Mineral oils, when imported by gas companies to be employed in the manufacture of illuminating gas; Cork, bark or plate; Live-stock, provided the provisions of the sanitary law are met; Apparatus, instruments and equipment for universities; Boats, assembled or in parts; Sugar cane, when imported by the ship owners; Coal, coke and charcoal; Wood and iron containers, assembled or in parts; Railroad and tramway equipment, including rails, spokes, ties, electric motors, cables, trolleys, wire, fuses, brakes, tires, springs, insulators, controllers, switches, etc.

Dynamite and special powder for mining purposes; Racing boats; Containers; tin cut in sheets, when imported by canneries and packing houses; Disinfecting stoves; Mange remedy; Water filters. Wheat and corn flour; Iron and steel junk; Fresh vegetables and fruits, except grapes.

Wood, intended for fuel; Printed books, newspapers, magazines and periodicals; maps and penmanships books; Harvesting, threshing, grain shaking, tannin extracting, sugar refining lard manufacturing, textile manufacturing, wool carding, mining or cotton cleaning machinery; Marine engines; Locomotives and parts thereof.

Materials for public works, sanitary and water works; War material for the government; Hospital supplies, when imported for the hospitals, except medical cotton; Coined money; Furniture and tools, when forming part of baggage of immigrants.

Rifle ammunition; Naptha, crude oil and carburine; Oranges; Church goods, when imported directly by churches; Gold nuggets, bars or dust; Fresh fish; Silver bar or bouillon; Life plants or seeds for sowing purposes; Medicinal serums; School supplies and material, when imported by the federal, provincial or municipal authorities.

Exporters of lard, milk and flour have the privilege of a rebate for the duties they may have paid on the importation of containers.

On October 1, 1919, the prohibition on the export of commodities imposed during the war was removed on all goods, except coined gold, scrap metals, and sugar, by a presidential decree.

EXPORT TAXES.

The export taxes in Argentina are not permanent. They are fixed for each month by the government. Changes, however, since the war ended have been very slight, so that figures are practically the same from one month to the other.

The figures available (Nov. 1919) are as follows:

	Unit	Basic Prices	Appraise- ments	Percent of duty on excess value	Taxes payable
		\$gold	\$gold		\$gold
Cattle, crossbred	per head	45.99	89.00	15	6.45
" 'criollo'	per head	45.99	52.80	15	1.02
Bran and pollards	1000 kilos	23.71	19.79	12	...
Oats, bagged	1000 kilos	29.32	40.33	12	1.32
Oats, in bulk	1000 kilos	27.22	34.27	12	0.845
Frozen and chilled beef	1000 kilos	223.30	261.70	15	5.76
Frozen mutton and lamb	1000 kilos	185.90	258.50	15	10.89
Jerked beef	1 kilo	0.2555	0.381	15	0.018
Dried ox hides	1000 kilos	657.37	859.11	15	30.26
Horses	per head	58.25	64.22	15	0.895
Quebracho logs	1000 kilos	15.51	20.05	12	0.544
Butter	1 kilo	0.712	0.843	15	0.0196
Salted ox hides	1000 kilos	382.79	736.45	15	53.04
Canned meat	1000 kilos	314.60	523.05	7.50	15.63
Maize, bagged	1000 kilos	27.63	35.20	12	0.908
Maize, in bulk	1000 kilos	26.00	27.13	12	0.135
Linseed, bagged	1000 kilos	62.71	121.94	12	7.10
Linseed, in bulk	1000 kilos	60.55	106.81	12	5.55
Goatskins	1 kilo	0.6000	2.370	15	0.265
Barley	1000 kilos	28.68	37.10	12	1.01
Wheat, bagged	1000 kilos	45.08	65.96	12	2.50
Wheat, in bulk	1000 kilos	43.47	64.14	12	2.48
Frozen meat offal	1000 kilos	132.00	198.00	15	9.90
Wheat flour	1000 kilos	76.69	101.00	6	1.45
Margarine and Pal- mitine	1 kilo	0.180	0.34	15	0.024
Tallow and melted fat	1000 kilos	166.98	362.38	15	29.31
Quebracho extract	1000 kilos	75.00	177.78	12	12.33
Sheepskins	1000 kilos	336.00	554.47	15	32.77
Unwashed wool from Provinces of Entre Rios and Corri- entes	1000 kilos	600.60	1063.92	15	69.49
Buenos Aires, San- ta Cruz and Ti- erra del Fuego	1000 kilos	462.00	917.84	15	68.37
Santa Fe, Cordoba, La Pampa, Rio Negro and Chubut	1000 kilos	369.60	872.08	15	75.37
Mendoza, San Luis and other points	1 kilo	1.10	1.14	15	0.006
Washed wool	1000 kilos	55.00	78.00	15	3.45
Dried blood	1000 kilos	26.40	36.00	12	1.152
Oil seed cake					
Shorn sheepskins, hogget and lamb- skins	1000 kilos	167.00	312.40	15	21.81
Frozen pig meat	1000 kilos	155.65	247.00	15	13.702
Salted pig meat	1000 kilos	220.70	355.00	15	20.14

**CONDITIONS OF SALE ADOPTED BY EXPORTERS'
ASSOCIATION IN BUENOS AIRES.**

The general conditions of sale adopted by the United States Exporters' Association in Buenos Aires when taking orders in this market for American products, are as follows:

1. On orders taken at c. i. f. prices, the price includes the cost of the merchandise placed on board vessel at the port of shipment, freight, marine insurance, and other minor expenses to port of destination. The obligation of the shipper with regard to delivery ceases as soon as the goods are shipped. The merchandise travels for account and risk of the buyer, and the shipper assumes no responsibility for its arrival at port of destination or for any damage it may suffer during the voyage or during discharge.

2. The conditions of the bills of lading and of the insurance policies which cover the goods detailed in this order form part of said order.

3. The shipper is not to be held responsible for any unexpected contingencies or any cases of "force majeure" and without prejudice to the generality of this stipulation, the shipper is specially exempt from responsibility in case of strikes, floods, fires, accidents, delays, or other difficulties in transportation to seaboard or ocean transportation or in case of interruptions of these services by acts of government or other competent authorities, or delays in the departure of vessels, or any other causes beyond the control of the shipper; all unexpected expenses, such as cartage, railroad, freight, storage, fire insurance, etc., are to be for account of the buyer.

4. In case of war the shipper may insure the goods against war risks for account of the buyer without the necessity of consulting the buyer.

TRADE METHODS IN ARGENTINA.

United States Trade Commissioner L. S. Garry advises firms desirous of doing business in the Argentine market to determine first of all a definite policy of doing business there. It would be advisable for a member of the firm, or a person well up in the administration, to make a preliminary trip to Argentina with a view to learning conditions at first-hand, to become acquainted with the merchants in the firm's particular line and with the banks, and to return with a complete collection of samples pertaining to the firm's products. Before entering on actual business suitable terms should be decided upon and those employees who are to have direct dealings with the details of Argentine business should be prepared before the orders arrive instead of, as often happens, not having learned what has to be done before the goods are ready for shipment. It is far preferable to refrain from entering the Argentine market unless the exporting firm is prepared and disposed to serve the interests affected in a thoroughgoing and efficient manner. Otherwise it will be found that the benefits that should have been derived from the trade will not be forthcoming, and the penalties that are entailed in slipshod or unenlightened ways of doing business will lead to disastrous results and sorry experiences.

LICENSES FEES FOR COMMERCIAL TRAVELERS.

License fee payable by commercial travelers in the Provinces and Territories of the Argentine Republic as compiled by the

Liga de Defensa Comercial of Buenos Aires, are contained in the following data, as published by the Department of Commerce. The license fees for the Provinces were in force during 1919. Those for the city of Buenos Aires and the National Territories are the amounts fixed in the budget law of 1918, which was continued temporarily. The fees are subject to change, but changes will not alter them to a great extent. Expressed in United States currency the taxes are:

The classification of merchandise for which traveler's licenses must be obtained in the Province of Salta and the amounts of the annual taxes are as follows:

Buenos Aires:		
Annual, for firms established in the Province	\$127.38	
Annual for firms established outside the Province	254.76	
Entre Rios		
For the year	254.76	
July-December	127.38	
Santiago del Estero:		
For the year	127.38	
July-December	63.69	
Cordoba:		
For the year	169.84	
July-December	84.92	
Santa Fé: Annual	169.84	
Catamarca: Annual	127.38	
San Luis: Annual	169.84	
La Rioja: Annual	63.69	
Tucuman:		
For the year	254.76	
July-December	127.38	
Jujuy: Annual, for each representation	84.92	
Annual, for each additional representation	42.46	
San Juan: For the year	254.76	
May-December	169.84	
September-December	127.38	
Corrientes: Annual	254.76	
Additional tax	25.48	
Salta: Annual	42.46	— 424.60
July-December	21.36	— 212.30
Federal District (City of Buenos Aires):		
Annual	212.30	— 2123.00
National Territories: Annual		42.46
Mendoza; if license is taken out in:		
First quarter		212.30
Second quarter		169.84
Third quarter		127.38

The classification of merchandise for which travelers' licenses must be obtained in the Province of Salta and the amounts of the annual taxes are as follows:

First.—Commercial travelers from outside the Province selling articles of textiles in general, clothing for men and children, and textile notions	\$339.68
Second.—Those selling notions, hardware, clothing for boys, specialties and novelties for women, articles for men	212.30
Third.—Those selling hats, women's dresses, laces and embroidery, footwear, cloth for suits and its accessories, wholesale groceries, perfumery with other small wares	169.84
Fourth.—Those selling liquors in general, books and paper, tanners' articles, and tanned leather, cigars, flour, yerba mate, and lace edgings	127.38
Fifth.—Those selling furniture, iron beds, drugs, shirts, silk handkerchiefs, glass and crystal, sewing thread, fire arms, cutlery, native wines, canvas slippers, sewing machines	84.92

Sixth.—Those selling crackers, preserves and candies, ground spices, baptismal costumes, brushes in general, neckwear 42.46
 Seventh.—Commercial travelers selling general merchandise of a single house 424.60
 Permanent licenses applied for up to the 30th of June shall be subject to the tax for the entire year. After that date, they shall be for six months and at half of the cost.

In the Federal Capital (city of Buenos Aires) licenses are non-transferable.

RAILROADS.

The earnings of the first railway put in operation—a six-mile line from Buenos Aires to Flores, opened in 1857—for the first year were \$19,185, and the expenses \$12,448. As shown by the following table, the railways of the country have increased since that year:

Year	Length Miles	Year	Length Miles
1865	154	1910	17,353
1870	454	1913	20,759
1880	1,560	1914	21,351
1890	5,848	1915	22,688
1900	10,269	1919	22,853
1905	12,072		

The approximate traffic returns of the principal Railways in Argentina from the 1st of July 1919 to the 26th of October 1919, were:

Railways	Length miles 1919	Percentage of last working expenses	Receipts in 1918	Receipts in 1919
			In \$	In \$
B. A. Great Southern	3,792	76.16	2,221,000	2,795,000
B. A. Pacific	3,536	65.80	2,035,000	2,355,000
Central Argentine	3,305	73.94	2,197,000	2,692,000
B. A. Western	1,882	75.68	1,190,000	1,631,000
B. A. Midland	322		76,000	101,000
Entre Rios	811	62.32	333,000	385,000
Arg. North Eastern	752	66.05	161,000	202,000
Central Cordoba	1,205	75.16	790,000	1,011,000
In all			9,002,000	11,152,000
			In paper \$	In paper \$
Rosario to P. Belgrano	493	83.04	1,295,000	1,453,000
Province of Santa Fé	1,188	68.98	7,106,000	7,054,000
Central Buenos Aires	252	59.03	1,812,000	1,942,000
General Buenos Aires	790	92.11	4,283,000	5,302,000
In all	18,328		14,496,000	15,756,000

This table does not cover the State Railways with a length of 3,813 miles in operation. The returns for the same period were 21,109,000 in Argentine money (paper) showing an increase of 534,000 over the previous year.

The following are the principal railroad companies:

Argentine North Eastern Railroad Co. British. Capital \$14,000,000. Mileage, 752.

Argentine Railway Co. Incorporated in Maine in 1912. Capital, \$45,000,000.

Bahia-Blanca and North Western Railway Co. Capital, \$33,000,000. Mileage, 874.

Buenos Aires Central Railway (Ferrocarril Central de Buenos Aires, Limitada). Incorporated in 1906. Capital, \$25,000,000. Mileage, 230.

Buenos Aires, Ensenada and South Coast Railway Co., Ltd. Capital, \$4,000,000. Mileage, 109.

Buenos Aires Great Southern Railway Co., Ltd. (British). Capital \$200,000,000. Mileage, 3,763.

Buenos Aires Midland Railway Co., Ltd. (Formerly B. A. Central Railway Co.) Capital, \$7,500,000. Mileage, 322.

Buenos Aires Western Railway, Ltd. Authorized capital, \$130,000,000. Mileage, 1,867.

Central Argentine Railway, Ltd. Authorized capital, \$208,472,340. Mileage, 3,307.

Central Railway of Chubut Co., Ltd. Capital, \$1,000,000. Mileage 63.

Compagnie Française de Chemins de Fer de la Province de Santa Fé, Société Anonyme (French Railways of the Province of Santa Fé). Incorporated, Paris, 1888. Capital, 72,000,000 francs. Mileage, 1,860.

Cordoba Central Railways Co., Ltd. Mileage, 1,186.

Entre Rios Railways Co., Ltd. Capital, \$25,000,000. Mileage, 730. Established in 1857. Five per cent. mortgage sterling bonds guaranteed by government.

Compagnie de Chemins de Fer de Rosario a Puerto Belgrano. Capital, 50,000,000 francs. According to the latest report, the mileage in operation was about 496. The business of the company showed a considerable decrease in the fiscal year ending June 30, 1917, the net profit being only 763,614 francs as against 1,781,614 in the previous fiscal year.

Buenos Aires and Pacific Railway. Capital stock £13,200,000. Outstanding debentures: 4½%, £5,000,000; 5%, £11,942,673. Directors: Rt. Hon. Viscount St. Davids (Chairman); T. Penn Gaskell, Edward Norman, C. E. Guanter, Hon. Sir Arthur Stanley, J. A. Goudge, Managing Director. Local Board: Dr. Santiago G. O'Farrell (Chairman); Henry Usher, Raul S. Zavalla, General Manager, Harry Usher, Secretary, S. Sanders. Offices: Dashwood House, 9 New Broad St., E. C. London. 783 Calle Florida, Buenos Aires, Argentina.

In 1858 the first tramway line was laid in the City of Buenos Aires.

The so-called Mitre law has now been passed by the Argentine Senate and has received the approval of the House of Deputies, thereby becoming effective. This law, which has been the subject of contention for several years, provides that all railroads in Argentina upon payment to the Federal Government of 3 per cent. yearly of their net profits will be exempt from all other taxation, with the exception of the following: Payments to the provincial governments through whose territories their lines pass for the provision of water received by the railroad companies and for sewerage service, also contribution to the cost of paying about their stations within the limits of urban centers in each Province. A definity guaranty is given to the railroad by this law, which will probably have a beneficial effect on railway conditions and improvement in Argentina.

By a decree of the Minister of Public Works the section of the Buenos Aires Central Railway (Ferrocarril Central de Buenos Aires) between Rojas and Villa María was definitely made ready for public service. The line has a length of 11 kilometers.

Some years ago the National Congress approved laws providing for the survey and construction of railway from Catamarca to Tucuman, a distance of 186 kilometers, at an estimated cost of 6,709,080 gold pesos. The road was never completed, but recently arrangements were made to continue construction work and to shorten the line about 30 kilometers.

The following figures represent the approximate traffic returns of the principal companies of Buenos Aires from January 1st, to October 28th, 1919:

Tramways	Length in miles in 1919	Receipts in \$
Anglo Argentine	387.1	2,242,000
Anglo Argentine Subway	8.6	253,000
		From July 1, 1919, up to and including Oct. 28, 1919
Lacroze	80.4	in paper \$ 2,060,000

These apparently favorable results in the gross receipts of the tramway companies are checked by increased expenditures.

POSTS AND TELEGRAPHS.

A law was passed in 1878 for the organization of the postal and telegraph services, placing both under the direct control and responsibility of the Ministry of the Interior.

There are in Argentina about 3,500 post offices.

There are over 2,232 miles of direct and continuous telegraph lines from Buenos Aires to the south of Argentina as far as Cape Virgenes; while from Buenos Aires going northward as far as La Quiaca, there are over 1,178 miles. Therefore, a total length of 3,410 miles is covered from La Quiaca to Cape Virgenes. The entire length of the lines in Argentina is 43,153 miles, with 131,586 miles of wire. The State owns 23,978 miles of this total.

Through the medium of their respective representatives, the governments of Paraguay and Argentina, on November 15, 1918, signed a convention at Asunción to exchange radio telegraphic service. Wireless telegraphic communication is a government monopoly in both countries, and it is hoped that the arrangement effected by this convention will result in much better service for Paraguay than its has heretofore enjoyed.

The Executive issued recently a decree granting a concession to the Siemens-Schubert Co. to operate commercially for their exclusive profit for a period of 30 years a powerful wireless telegraph station capable of communicating direct with central Europe. The station will have 400 kilowatts power according to the system of continuous waves, produced by high meterspower, Telefunken machines, of a length of 10,000 or more meters. The rates are to be approved by the President

of the Republic, and the rates in force between Argentina and Germany shall be two-thirds less than the present cable rates. The concession referred to does not imply a monopoly nor any special privilege whatsoever.

There are 12 wireless stations. Besides, all vessels with a crew of 50 or more men are required by law to have a wireless outfit.

The Navy Department recently ordered the wireless telegraph station on Martin García Island, near Buenos Aires, opened to public service. This station covers a radius of about 100 miles.

SHIPPING.

The scarcity of tonnage has continued and in consequence the rates of freight and selling prices of steamers have risen. In some instances extraordinary prices have been paid for ready steamers.

The entries of overseas steamers and sailing vessels at the port of Buenos Aires during the first half of 1919 were:

	No. of vessels	Tonnage
Belgian	4	13,473
Brazilian	26	39,494
Chilean	2	536
Danish	10	16,403
Spanish	30	78,754
French	14	56,398
Dutch	18	51,352
British	115	372,104
Italian	29	90,584
Japanese	12	45,488
Argentine	31	19,018
North American	48	99,261
Norwegian	49	83,026
Peruvian	1	2,083
Swedish	17	37,630
Uruguayan	1	1,504
Totals	407	1,007,108
Entries same portion 1918	510	1,271,297

RATES TO THE UNITED STATES.

A radical drop has taken place in freight rates to the United States, Italy, and Brazil. Rates to the United States are now as follows: (Expressed in tons unless otherwise indicated). General cargo, \$28; wet salted hides, \$18; tallow, \$25; wool, \$18 per 40 cubic feet; cased meats, \$2; linseed, \$15; heavy grain, \$14. Freight rates to France, Spain, and Antwerp have fallen 15 to 40 per cent. on all items. No appreciable change to Scandinavian ports and no change to United Kingdom. Rates of £6 10s. per ton in sailing vessels to the United Kingdom and to United States \$15, but this tonnage not in demand.

The Minister of the Treasury issued, under date of February 27, 1919, an order concerning commercial transit from Chile, with the object of eliminating the delays and difficulties of

lading and unloading goods originating in Chile and consigned abroad, via Buenos Aires.

The Executive power has promulgated a new coastwise law, the principal provisions of which are as follows: The navigation and coastwise trade between ports of the Republic is reserved for ship flying the Argentine flag, but foreign vessels are permitted to enter one or more ports to unload freight which they bring from abroad and to take on export cargo. Vessels engaged in the coastwise trade, in order to be considered national, must use the Argentine flag, be commanded by Argentine captains, and have a crew of at least one-fourth Argentines when the vessels are not less than 200 tons. Foreign vessels detected in illegal coastwise trade are subject to a fine of from 4 to 12 pesos per ton or registry. The Executive may arrange, through reciprocity, to allow foreign vessels to enjoy the privileges of national vessels, provided, always, without being subventioned by the State, they engage exclusively in navigating between Argentine ports and their respective countries. The President may grant bounties to naval shipyards and to Argentine navigation companies which organize and maintain regular oversea or coastwise service. These bounties are only applicable to ships flying the Argentine flag, whose owners live in the country, or which belong to companies organized abroad but whose principal offices, reserve funds, and legal domiciles are in the Argentine Republic.

A Spanish Steamship Line with five large vessels available will establish a regular service between Buenos Aires, New York, and the principal ports of Spain.

At least two concerns have attempted to take advantage of the shortage in shipping to construct vessels locally. The first week in December a small concrete boat (the first one built here) of 200 tons was launched, but apparently the results were unsatisfactory, as it is now reported that this firm will build no more concrete boats. Three small wooden vessels—one a 500-ton ship and two barges of 300 tons each—are now on the ways on the Rio Lujan, about 25 miles from Buenos Aires. The Union Trading Co. (Svenson-Ohlson Co.), is financing the project, but it is proposed to organize a separate stock company for the shipbuilding feature. While it is intended to create and supply a demand for small coastwise boats to ply the east coast of South America, there is no intention to construct vessels for overseas. Aside from the two projects mentioned, there is no other shipbuilding in progress.

French, Italian, and British steamship companies maintain a more or less limited service with Argentina. The Spanish Trans-Atlantic line has tried hard to improve its service with Buenos Aires.

Besides these, the following are the principal shipping companies doing business now in Argentina:

American and River Plate Line. Service from New York and New Orleans to River Plate and Brazilian ports.

Argentine Navigation Co. (Nicholas Mihanovitch), Ltd. Office, 8 Crosby Square, London, E. C., and Buenos Aires. Capital, \$10,000,000. Runs over 300 steamers between Argentina, Uruguay, and Southern Brazil.

British and Argentine Steam Navigation Co., Ltd. Passenger and cargo service between Great Britain, Antwerp, Buenos Aires and River Plate.

Domingo-Barthe and Co. Steamship service between Buenos Aires and Paraguay.

Lloyd Brasileiro. Steamship service between Brazil, Argentina, and Uruguay. Office, Buenos Aires.

Marina Mercante Argentina. Coastal service between Argentina, Brazil and Uruguay.

Nelson Line. Steamship mail and passenger service between England, Argentina and Uruguay.

Norton Line. Service between New York, Brazil, Argentina and Uruguay.

Société Générale de Transports Maritimes à Vapeur. Steamship service between Mediterranean ports, Argentina, Brazil and Uruguay.

In January 1919 the wharf of the new port of Buenos Aires was opened to public service, the works of said port having cost 25,000,000 pesos gold. The water alongside the new wharf is 33 feet deep, and the anchoring walls have a length of 365 meters. The warehouses are two stories high, built of cement, and are fireproof, each one having a capacity for the storage of 10,000 tons of cereals.

The most important shipping concerns are:

Buenos Aires Southern Dock Co., Ltd. (British). Office, River Plate House, Finsbury Circus, London, E. C. Capital auth., \$5,000,000; issued, \$3,500,000. Perpetual concession from Argentine Government to construct, own and work docks at Buenos Aires. Directors, H. C. Allen, Chairman; J. Percy Clarke, M. Inst. C. E.; Frank Henderson, William Higgins, Major Woodbine Parish, D. A. D. M. Auditors Deloitte, Plender, Griffiths & Co. Local Committee, Alfredo Demarchi, Fernando D. Guerrico (Chairman), Guillermo J. White, J. M. Eddy. Secretary, William Flint, 564 Cangallo, Buenos Aires. Acting General Manager, J. M. Eddy. Secretary of London Board, C. H. Lambert.

City of Buenos Aires Markets Co., Ltd. (Sociedad Anónima Mercado Ciudad de Buenos Aires). Capital, \$2,000,000 paper. Poultry, meat, fruit, and vegetable markets.

Compañía Muelles y Depósitos del Puerto de la Plata. Capital, \$6,400,000 gold. Pier and warehouses at La Plata.

Catalinas Warehouses and Mole Co., Ltd. (Vías de Ferrocarril Catalinas). Capital auth. \$7,100,000 (U. S.) Owns dock warehouses at Buenos Aires.

Central Produce Market of Buenos Aires (Sociedad Anónima Mercado Central de Frutos). Established in Argentina in 1886. Capital, authorized, \$3,000,000; issued, \$2,734,400. Central Market concession at the terminus of the Western Railway of Buenos Aires on the Riachuelo.

Argentina Warrant Co., Ltd. Reg., Buenos Aires. Warehousing and forwarding.

FINANCE.

Normally Argentina has an annual deficit, but since the beginning of the European War this deficit increased considerably and has been covered by internal loans and advances made by banks. The budget for 1919, however, showed a surplus, which may have not materialized.

Argentina's revenue and expenditure for six years from 1914 to 1919 is as follows:

ARGENTINA.

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Year	Revenue	Expenditure
1912	\$181,151,485	\$172,234,370
1913	195,121,205	192,647,105
1914	185,094,875	185,540,140
1915	234,357,605	238,155,760
1916	178,741,165	154,118,280
1917	150,858,530	160,694,605
1918	164,301,530	172,035,370
1919	174,849,765	174,839,140

(Figures are approximate, in American money).

The territorial taxes collected from January 1 to September 30, 1919, amounted to 45,647,555 pesos, currency, as compared with 40,249,970 pesos, currency during the same period in 1918.

The budget which the President submitted to Congress for the year 1919 estimated the expenditures at 397,361,680, national currency. The Executive recommended that part of the revenues be collected from an income tax imposed upon every person or incorporated body domiciled in the Republic at the rate of 2 per cent. on their net income of the preceding year. Persons nonresident in the country, whether Argentine citizens or foreigners, and corporations organized outside the national jurisdiction, were to pay 3 per cent. on the net income obtained from their properties in the Republic. Every contributor should pay an additional quota per annum on the total income in accordance with a scale of values.

The budget for 1920 is estimated at 428,234,973.72 in Argentine money, distributed as follows:

Congress	4,598,156.00
Interior	53,437,088.36
Foreign Affairs and Public Worship	4,295,534.01
Finance	17,109,833.60
Public Debt	126,445,894.03
Justice and Education	71,367,726.00
War	41,421,512.57
Marine	31,300,878.18
Agriculture	11,187,100.00
Public Works (the Department)	13,811,295.00
Pensions, annuities and retiring allowances	17,414,244.72
Public Works (the Works)	24,173,000.00
Subsidies and comities	11,662,711.00

The financial conditions of the country are not considered satisfactory in the report submitted by the government to Congress, in connection with the budget for 1920. The report says, in support of additional taxes to obtain financial equilibrium.

"The reasons determining the institution of the income tax are very obvious.

To begin with, it responds to unavoidable exigencies of the present moment. Budget deficits have been accumulating year after year, giving rise to the enormous public debt, both consolidated and floating. The mere fact that the service of the public debt calls for the sum of \$124,000,000 (Argentine money, in round figures) and the prospect that in a very few years

more the accumulated deficits will raise the figure to \$200,000-000 Argentine money, that is to say to 50 per cent of the Budget, are facts to cause the utmost alarm."

DEBT

The external debt of Argentina on January 1st, 1919 was as follows, in British currency, practically all of it being held in Great Britain.

	Original Amount	Amount Outstanding
I. Ordinary Issues	£86,360,584	£66,248,802
II. Special	34,744,390	28,847,041
III. National Cédulas	88,869,128	52,531,806
Total	209,974,102	147,627,649

The debt of Argentina to the United States is 47,720,000 dollars, of which 15,000,000 are in railroad securities, and the balance in government bonds.

The exact amount of the internal debt is not known, as advances are being continually made by the Bank of the Argentine Nation. The latest available figures place the internal debt at \$202,535,600 Argentine gold, and \$223,295,500 Argentine paper.

The internal debt of the province is subdivided into several bond issues, practically all of which are listed on the Bolsa at Buenos Aires. The approximate total of this debt is as follows:

Loans	Total Out- standing
5 per cent. School, etc., Loan (1900)	2,205,800
6 per cent. Conversion Loan	7,504,450
6 per cent. "Mont-de-Piété" Loan	35,325,250
6 per cent. School Loan	5,749,100
6 per cent. Health Works Loan	8,837,000
5 per cent. Bank of the Province Loan	12,596,920
5 per cent. Road Paving Loan	7,924,000
5 per cent. Paving Loan	1,125,200
2½ per cent. Savings Bank Loans	8,246,120
Total	89,515,120

The Province has outstanding an external loan, listed in London, which carries interest at the rate of 2½ per cent. per annum until 1924, when the rate will be raised to 3½ per cent. The rates will then be advanced over a period of years to 3½ and 4 per cent. The bonds sell at approximately 40 per cent. and the amount outstanding is \$703,800. The bonds are dated 1887-89.

PROVINCE OF CORRIENTES

This Province, in the year 1910, issued £396,825 of 6 per cent. external gold bonds in Great Britain and on the Continent. The British investors subscribed to approximately two-thirds of the total at 98 per cent. The loan is secured on railway mileage and on certain taxes. In August, 1915, the Province was unable to meet its coupons owing to existing conditions.

Other coupons have since been unpaid. The bonds sell at about 70 per cent.

OTHER PROVINCIAL LOANS (INTERNAL)

Several of the other Provinces of the Republic have, from time to time, been borrowers in the local markets of Argentina. Space will not permit a full study of the finances of these Provinces. A few of these loans are:

Loans	Dated
Consolidated debt, Province of Santa Fé	1886
Consolidated debt, Province of Santa Fé	1893
School bonds, Province of Santa Fé	1903
Public building bonds, Province of Santa Fé	1903
Consolidated debt, Province of Entre Rios	1903
School bonds, Province of Entre Rios	1903
Public funds, Province of Entre Rios	1905
Pavement funds, Province of Mendoza	1909
Internal public debt, Province of Mendoza	1914
Internal public debt, Prov. Santiago del Estero	1914
Loan of the Province of Tucuman	1906

In addition to these internal loans and other of like character, the provinces of Santa Fe, Tucuman, Mendoza, and San Juan have external loans outstanding. These are small loans, and, with the exception of 6 per cent. bonds of the Province of San Juan, the interest rate is 5 per cent. All the loans are provided with sinking funds of from one-half to 1 per cent. No recent quotations are available.

A number of the Provinces are responsible for the service of the 4 per cent. provincial and municipal debt bonds of the Republic.

MUNICIPAL LOANS.

The principal municipalities in Argentina that have sought loans abroad are, Buenos Aires, Rosario, and Santa Fe, all of which have been borrowers in the European markets. Buenos Aires has, naturally, been the largest borrower, and has secured—largely in Great Britain—considerable sums for municipal improvements. The most important of the Buenos Aires loans are the following:

Loans	Amount outstanding
4½ per cent. bonds of 1889	£ 537,320
5 per cent. loan of 1909	1,453,660
5 per cent. loan of 1913-14	4,920,140

In addition to assuming the responsibility for the 5 per cent. loan of 1909, the Government considers the outstanding balance of the \$20,000,000 currency loan of 1891 among its internal obligations. The September, 1917, price for these bonds was 91.50. The Government is also responsible for the 6 per cent. loan of 1897 (internal).

The municipality of Rosario has outstanding £1,982,775 bonds of an issue of £,000,000 4 per cent. gold external bonds.

guaranteed principal and interest by the Province of Santa Fé. The bonds were originally issued in 1887, and in 1889, and were placed on a full interest basis in 1913. The direct tax of the Province of Santa Fé has been assigned as security. A recent price is 46 per cent. Two internal loans are also obligations of the municipality. One bears interest at 7 per cent. and has a sinking fund of 1 per cent., and the other bears interest at 6 per cent. and carries a 2 per cent. sinking fund.

In 1889 the City of Santa Fé issued bonds to the amount of £257,900 at 6 per cent. These bonds defaulted in 1891, but part of the arrears were made through the issuance of £42,100 sterling funded coupon bonds. From 1905 to 1915 interest was paid at the rate of 4 per cent. per annum in Argentine currency, and from September, 1915, at the rate of 6 per cent per annum, also in currency. The latest £3 semi-annual coupon realized £1 6s. The bonds and the sterling coupon bonds were quoted, in January, 1918, at about 26 per cent of par (£100). The original offering price was 95 per cent.

In 1918 the debt of the municipality of Buenos Aires was made up of the following items: Consolidated foreign debt, 27,637,153 pesos, gold; consolidated internal debt, 6,107,220 pesos currency; floating debt, 5,786,928 pesos, gold, and 47,770,423 pesos, currency.

The revenues of the municipality of Buenos Aires collected during the fiscal year 1918 amounted to 38,556,083 pesos, currency.

LOANS PROPOSED.

On September 3, 1919, the President of the Argentine Republic submitted to Congress a proposal for a law authorizing an international loan of 600,000,000 pesos, paper, to be used for consolidating the floating debt. The loan is to bear 5 per cent. interest, with amortization at 2 per cent. per year. Under the proposed plan, the 2 per cent. destined for amortization may be used during the first 20 years, either wholly or partially, for service of prizes in the manner of a lottery. Interest is payable quarterly. The amount fixed for the premiums will be divided yearly into two drawings among the total of the bonds outstanding, and the bonds drawing prizes will be retired. The value of the prizes is to be at least twice the par value of the shares.

The finance committee of the Chamber of Deputies rendered a majority report in favor of a convention for the sale to Great Britain, France, and Italy of the harvest, advancing to these Governments, jointly and severally, 200,000,000 gold pesos at 5½ per cent interest for the term of two years, they to apply this credit to the acquisition of maize and wheat for at least 75 per cent. of the same, and other Argentine products for the remainder, all to be shipped before February 28, 1920. The President of Argentina is given the power to fix a minimum price for the export of the harvest of this year and next. A minority report is included to the general effect that the same

credit be extended to any nations whose governments have been recognized by the Republic of Argentina.

BANKING

The condition of the banks in Buenos Aires—the center of trade of the Argentine Republic—is of keen interest.

Year	Deposits	Discounts & Advances	Cash Balance
1910	\$565,425,855	\$554,222,655	\$205,204,995
1911	584,225,560	618,675,775	206,577,530
1912	630,601,595	649,528,360	231,160,090
1913	643,043,920	674,628,935	245,782,815
1915	613,158,605	520,478,625	288,136,250

The condition of the banks in January, 1919, was as follows:

The condition of the banks in January was as follows:

Deposits, gold, 10,720,200; paper, 2,858,001,962.

Discounts and advances, gold, 3,017,931; paper, 2,004,598,408.

Cash reserves, gold, 53,849,423; paper, 829,457,236.

Capital subscribed or corresponding to the Argentine Republic, gold, 47,865,413; paper, 354,345,178.

The Argentine Government deposited in March 1919 in one of the Federal Reserve Banks of the United States the sum of \$2,917,800 or 6,872,745 pesos Argentine, representing the profit of the exchange by the transfer of 8,000,000 from England to the United States by way of France and Spain.

In June 1919, the Postal Savings Bank did the largest business recorded so far in the history of that institution. The transactions of the bank numbered 72,159, and represented a total of 2,365,883 pesos. On June 30, 1919, the Postal Savings Bank had 294,650 depositors, whose total deposits represented 17,247,683 pesos, of which 16,353,550 pesos were invested in Government securities. The bank had 1,120 agencies throughout the Republic.

The largest banking institution in Argentina is the Bank of the Argentine Nation (Banco de la Nacion Argentina), which was created in 1891 and reorganized in 1902. It is an official institution, and its by-laws provide that all net profits shall be applied to the increase of the capital. It is conducted by a Board of Directors named by the President of the Republic and confirmed by the Senate. Managers in the main and branch offices (over 150 in number, all over the country) carry the policy dictated by the Board of Directors. It was originally established with a capital of \$50,000,000 Argentine money.

According to the balance of the Bank of the Argentine Nation for February, 1919, the deposits amounted to 3,174,418 gold pesos, and 1,178,738,579 paper pesos, as compared with 3,175,523 gold pesos and 1,197,254,540 paper pesos in January, 1919. The discounts on accounts current amounted to 5,009 gold pesos, and 260,547,279 paper pesos, as compared with 5,009 gold pesos and 258,913,114 paper pesos during the previous month. The cash on hand was 36,077,283 gold pesos and 345,767,773 paper pesos, as compared with 36,085,753

gold pesos and 341,767,908 paper pesos in January of the same year.

Other important banks are:

Banco de Italia y Río de la Plata. Head Office, Buenos Aires. Capital paid up, \$10,000,000. Branches: Bahía Blanca, Concordia, Gualeguay, Gualeguayehu, La Paz, La Plata, Parana, Resistencia (Chaco), Rosario (Santa Fé); Uruguay: Victoria. Agencies: Ensenada (La Plata); Bahía Blanca, Puerto Ingo.

Banco de la Provincia de Buenos Aires. Head Office, La Plata. Central office, Buenos Aires. Capital paid up (1913), \$61,446,300. Forty branches.

Banco Español del Río de la Plata. Established in 1886. Head office, Buenos Aires. Capital, \$48,650,790. Sixty-nine branches in Argentina, Brazil, Uruguay, Europe.

Banco Francés del Río de la Plata. Established in 1886. Head office, Buenos Aires. Capital, \$28,000,000. Reserve fund, \$7,000,000. Thirteen branches.

Banco Popular Argentino. Established 1887. Buenos Aires. Capital, paid up, \$10,498,971. Reserve fund, \$5,259,760.

Hollandsche Bank Voor Zuid-America (Banco Hollandés de la América del Sud). Head office, Amsterdam. Branch, Buenos Aires. Capital, florins 4,000,000 (\$1,600,000).

Nuevo Banco Italiano. Established 1887. Buenos Aires. Schweizerisch-Sundamerikanische Bank. Established 1912. Head office, Zurich. Authorized capital, \$4,000,000. Capital paid up, \$2,000,000. Branch, Buenos Aires.

German Transatlantic. Capital, 3,650,000 gold pesos.
Anglo South American. Capital 11,338,636 paper pesos.
Argentino-Urugayo. Capital, 2,509,560 paper pesos.
British of South America. Capital, 4,536,000 gold pesos.
Commercial del Azul. Capital, 1,200,000 paper pesos.
Italian Commercial. Capital, 5,000,000 paper pesos.
España y América. Capital, 1,393,330 paper pesos.
French and Italian. Capital, 2,500,000 gold pesos.
Galicia y Buenos Aires. Capital, 17,208,680, paper pesos.
German and South American. Capital, 1,729,000 gold pesos.
Italo-Belga. Capital, 1,000,000 gold pesos.
London and Brazil. Capital, 1,268,190 gold pesos, and 1,950,000 paper.

London and River Plate. Capital, 4,250,000 gold pesos.
National City Bank of New York.
First National Bank of Boston.

The National City Bank of New York in Buenos Aires opened a branch in Rosario, Argentina, on March 10, 1919. This bank, while a branch of the Buenos Aires house, will operate independently in most cases and is empowered to do a full banking business. The commercial possibilities for this branch are very bright. Rosario is the second largest city in Argentina, an important railroad center, and is the shipping port for a large portion of the Republic. There are at present 16 banks in the city, the majority of which are branches of Buenos Aires banks. However, the new institution is the first American bank to be opened in the city, and in view of the increasing commerce between American manufacturers and exporters and the Rosario district, the bank should play an important factor in the commercial life of that district.

The National City Bank of New York opened another branch in Buenos Aires before April 15, which is known as the Plaza Once, Buenos Aires branch.

A representative of the Royal Bank of Canada recently ar-

rived in Buenos Aires for the purpose of opening a branch of that institution in the city.

A bill has been introduced in the Argentine Congress directed particularly against foreign banks, providing that all branches of foreign banks established in the Argentine Republic shall pay a special Federal tax of 20 per cent. on their annual net profit, unless the country from which they come permits Argentine branch banks to accept deposits and operate with the same freedom that the foreign banks enjoy in Argentina.

The branches of foreign banks shall pay a tax of 20 per cent. on all profit gained in this country.

This shall not apply to banking establishments from countries where the laws permit Argentine banks which wish to establish branches the same freedom as their own banks, and which do not levy any special tax against them.

This shall not apply to branches of foreign banks which do not operate as banks of deposit in Argentina, or to foreign banks which establish themselves as Argentine stock companies.

The special tax created by this law shall apply without in any way interfering with other taxes which are already in force.

On August 31, 1919, three months after starting operations, the deposits of the Banco Argentino-Uruguayo, Buenos Aires, amounted to \$6,660,000. On the same date discounts and overdrafts amounted to \$2,549,000, while the total cash figured at \$4,680,000, all given in United States currency.

The first emission of 2,700 Argentine pesos, authorized capital, has been totally subscribed and cash corresponding to over half has been actually paid in. The authorized capital may be increased to a maximum of 50,000,000 pesos.

BANKING HOLIDAYS OF ARGENTINA

January 1, New Year's Day; January 6, Epiphany; February 16, Monday before Lent; February 17, Tuesday before Lent; April 1, Holy Thursday; April 2, Good Friday; April 3, Holy Saturday; May 25, Independence Day; May 13, Ascension Day; June 3, Corpus Christi; June 29, St. Peter and St. Paul; July 9, Proclamation of National Independence; August 15, Assumption; August 30, Santa Rosa de Lima; October 12, Discovery of America; November 1, All Saints' Day; November 11, St. Martin of Tours (Patron Saint of Buenos Aires); December 8, Immaculate Conception; December 25, Christmas Day. On all these days banks and business houses are closed, as are also Government offices, law courts, etc. As October 12 falls on Sunday, the following day may be observed.

MONEY.

During the War Argentina increased its store of gold by about 50 per cent. Estimates made by the conversion office (caja de conversion) are as follows:

Year	Pesos
1913	294,934,755
1914	274,668,964
1915	332,557,899
1916	350,179,783
1917	373,909,545
1918	436,000,000

The Argentine gold peso in United States values is worth 96.48 cents, so that the 436,000,000 pesos represents nearly \$421,000,000 United States money.

The bulk of Argentine Gold is held by the conversion office as guaranty for the national paper circulation. The amount of gold so held and the circulation for the six years was:

Year	Gold	Paper circula- tion	Proportional guaranty
1913	233,197,716	823,263,045	72.6
1914	224,405,298	803,820,275	63.5
1915	305,636,048	987,645,615	67.1
1916	316,835,326	1,013,098,518	71.0
1917	316,852,151	1,013,136,757	71.0
1918	379,032,643	1,154,454,054	74.6

The guaranty is on the issue and redemption value of the paper peso at 44 per cent of its face value in gold. The guaranty is of its redemption value, which for the outstanding circulation on November 30, 1918, of 1,154,454,054 pesos, amounts to 507,959,784 pesos, of which the gold reserve is 74.6 per cent.

Deducting the amount held by the conversion office from the estimate first given of 436,000,000 pesos gold, there remains in Argentina, available for commercial purposes, without any contraction of the paper currency, a stock of about 56,000,000 pesos gold, equivalent to about \$54,000,000 American money.

The peso nacional or dollar, of 100 centavos is the Argentina unit. The 5 dollar gold piece (the Argentino) weighs 8.0645 grammes '900 fine, and therefor contains 7'25805 of fine gold.

The silver (like the French 5 franc piece), weighs 25 grammes, '900 fine, and thus contains 22.5 grammes of fine silver. There are 20, 10, and 5-centavos nickel coins, and copper fractional money.

Professedly the standard of value is gold. The money in circulation is chiefly paper. The paper dollar is convertible at '44 gold dollar.

The creation of a new State bank, to be named "Banco de la Republica", with the mission of regulating the monetary circulation by the issue of bank notes and the re-discounting of the portfolios of banks incorporated to its system, and also to further preferentially, the development and stability of the sources of production of the country, has been one of the schemes advocated by the Government ever since 1917, when it first sent to Congress a Bill regarding this matter. The project of the Government was not well received then by Congress.

The new Bill was submitted by the Executive to Congress in

September, 1919; it is almost exactly the same as the original project.

Another important question revived by the Government, which has sent a new bill to Congress with regard thereto, is that of the creation of a National Agricultural Bank ("Banco Agrícola de la Nación").

The gold in the Caja de Conversion at the end of December, 1919, amounted to \$304,849,943.

The gold deposited in the Argentine Legations amounts to \$78,996,805.

On July 18, 1919, gold deposits in the Caja de Conversion was as follows: Local deposits, 280,056,197 pesos; bonds for deposit in legations, 103,742,188 pesos; or a total of 383,798,385 pesos.

Notes in circulation \$1,165,397,203.

REAL ESTATE OPERATIONS.

In 1918 the mortgage records in the federal capital showed the following values in pesos, currency: Mortgages recorded, 83,788,593; mortgages canceled, 136,163,891. In 1913 the mortgages recorded amounted to 261,982,000 pesos; in 1914 to 177,477,000 pesos; in 1915 to 88,030,000 pesos; in 1916 to 73,010,000 pesos; and in 1917 to 69,451,000 pesos. The mortgages canceled in 1913 represented a value in pesos of 118,099,000; in 1914, 97,752,000; in 1915, 98,081,000; in 1916, 124,223,000; and in 1917, 133,540,000.

The mortgages executed in the city of Buenos Aires, during the first six months of 1919 amounted to 2,192, against 1,086 recorded in same period of 1918. The amounts of loans were 33,870,647, as compared with 19,613,665 loaned in same period of the previous year.

The average of the loans per square meter was 36.74 Argentine paper pesos.

The sales of city real estate in the first six months of 1919 amounted to 70,910,650 Argentine paper, showing an increase of nearly twenty millions over the same period of 1918. The average price paid per square metre of property sold was 29.39 Argentine paper pesos.

According to a recently issued Report by the Director of Rural Economy and Statistics, Dr. Emilio Lahitte, the sales during 1918 amounted to \$349,360,782 Argentine money, and the area of the properties which changed hands was 6,435,518 hectares. The annual averages over the decennium 1907-1916 were \$284,128,721 and 8,142,770 hectares.

FAILURES.

A considerable decrease is shown in the amounts involved in commercial and private failures all over Argentina, since 1917. This is explained by the better readjustment of business after the disturbances caused by the world war.

According to unofficial statistics, the total liabilities for the year 1917 were 79,871,513.07 Argentine paper pesos; in 1918

they sent down to 38,747,386.79, or less than fifty per cent. and in the first half of 1919, the liabilities involved in the commercial and private failures amounted only to 17,960,565.28.

In the order of trades affected, the produce dealers and the private failures are the largest, while tailors are at the bottom of the list.

LABOR CONDITIONS.

The number of strikes registered during the first six months of 1919 was far greater than the total since 1907, excluding 1910. Of the movements which occurred between January 1st and June 30th, 1919, 259,—237 were partial in extent and 22 were general. In the latter, one was of a revolutionary character, which had its origin in motives of solidarity.

The number of workers affected by strikes during the period here dealt with, was 262,319; this is far in excess of any previous total; only in 1907 were a large number of workers involved, and even for that year, the total did not approach the figure for the first half of 1919. The following is a classification by main groups, of the causes of the strikes; but it must be remembered that in the majority of cases the demands of the strikers not only had reference to wages, but also to working hours, the recognition of trade groups or organizations and their delegates, etc.

Causes	No. of strikes	No. of strikers
Wage questions	198	61,945
Working hours	10	658
Organization questions	46	196,768
Other working conditions	5	2,948
	259	262,319

Turning to the results secured by the strikers, the following table is self-explanatory:

Result	No. of strikes	No. of workers involved
Favorable	119	28,805
Unfavorable	87	62,309
Partially favorable	52	21,205
Returned to work	1	150,000
	259	262,319

As to the trades involved, the foodstuff industry shows 32 strikes; tobacco, 6; chemical, 10; textile, 19; clothing, 53; wood, 15; printing, 13; metal, 43; building, 12; transport, 26; leather, 4; electrical, 5; sundry, 21.

FOREIGN INVESTMENTS

Great Britain's financial stake in Argentina exceeds \$2,000,000,000, according to conservative estimates.

In discussing this situation, the National Bank of Commerce, of New York, says: "It is known that British capital in railways alone amounts to \$1,138,756,484. This represents about

ten times the railway investment of any other foreign country in Argentina. The distribution of British capital by industries shows how thoroughly the British lender has penetrated into the economic life of the country:

Tramways	\$183,434,262
Forestal products	31,239,952
Gas	29,661,644
Mortgage companies	28,408,685
Tobacco, sugar, wine and beer	28,062,336
Meat freezing and preserving	27,241,081
Docks, warehouses and waterworks	27,097,519
Farms and ranches	24,662,999
Genelar stores	21,067,079
Telephones and telegraphs	15,557,840
Electric light and power	14,239,411
Metallurgical and mineral	5,429,837

Other countries in order of their importance in investments are: France, Belgium, North America, Chile, Germany, Holland, etc.

The number of stock companies in operation in the Argentine Republic in 1917 was 840, of which 69 per cent., or 581, were Argentine, and 31 per cent., or 259, were foreign companies. Among the foreign corporations the English occupied the first place, with 150 companies, or 58 per cent., followed by the United States, with 28 corporations, Belgium with 25, France with 19, and Germany with 12.

The Argentine commercial companies had a paid up capital of 718,422,594 pesos currency, and the foreign companies 459,914,551 pesos currency.

The capital of Argentine industrial corporations is given as 303,350,085 pesos, and that of foreign corporations 220,863,057 pesos

Between \$4,000,000,000 and \$4,500,000,000 gold of foreign capital is invested in Argentina, according to an estimate made by Dr. Alberto B. Martinez, the well-known Argentine statistician. Dr. Martinez divides foreign investments in Argentina as follows, the amount being in gold pesos of \$0.9648:

	Pesos
Various Argentine loans and issues	657,302,460
Railways	1,344,326,465
Banks	51,891,022
Ports	22,163,909
Tramways	109,496,149
Freezing establishments	40,916,439
Gas, electricity, water and drainage companies	78,373,018
Land and rural property companies	79,681,618
Mortgages	500,015,962
Insurance	3,886,464
Industrial establishments	507,760,000
Telephone and radio-telegraphic companies	21,340,000
Commerce	465,169,244
Total	3,882,323,750

Government loans of the Argentine Republic have long enjoyed wide favor among European investors. In pre-war days the bonds sold at a substantial premium, indicating the high credit of Argentina in the European markets. After the out-

break of the war, the closing of the markets of Great Britain, France, and other countries brought about a decline in the market value of these bonds, and naturally compelled Argentina to pay a higher price than before for necessary funds. In view of the war, the Government has been obliged to retrench in many branches of its service, and postpone the carrying out of certain improvements of a national character. Revenues from customs and other sources fell far below expectations, and the general business depression, which dated from a period shortly before the war, was so long extended, that fears were expressed that governmental financial difficulties might arise. However, despite the financial uncertainty, the Government maintained its credit in a most praiseworthy manner and punctually met all obligations.

PUBLIC UTILITIES.

The public-utility field has attracted considerable European capital to Argentina. According to the national industrial census of 1910, there were 56 power stations in the Republic, in which \$48,737,877 Argentine money was invested. This number has since greatly increased, as will be indicated by the following statement, showing the number of cities and towns with power stations: Buenos Aires city, 1; Buenos Aires Province, 66; Entre Rios Province, 11; Santa Fé Province, 17; Corrientes Province, 8; Cordoba Province, 10; other Provinces and Territories, 19; total, 132.

This total includes a number of plants in the course of construction. Gas plants have been established in a few cities and towns; they are, however, not nearly so numerous as electric-lighting systems. No natural gas is obtainable in the country, except in distant localities, and electricity has proved the favorite method of lighting throughout the Republic. Tramways have been built in most of the larger cities, there being 1,091 kilometers (678 miles) of main track in operation at the beginning of 1915.

Electric Light and Power Companies.

The most important electrical company in the River Plate countries is the German Transatlantic Electricity Co. (*Compañía Alemana Transatlantica de Electricidad*.) The company was formed in 1898 with a capitalization of 6,000,000 marks. Work in Buenos Aires was soon begun and the enterprise developed rapidly. The company has a certain amount of competition, especially from the Italo-Argentine Electricity Co. (*Compañía Italo-Argentina de Electricidad*) in Buenos Aires. At the present time the capitalization of the German Transatlantic Electricity Company consists of 110,000,000 marks bonds, 30,000,000 marks 5 per cent. preferred stock, and 120,000,000 marks ordinary stock. Before the war dividends of 10 to 11 per cent. per annum (10 per cent. in 1914) were paid on the ordinary stock.

Another important electrical company operating in Buenos

Aires is the recently formed Italo-Argentine Electricity Co. (Compañía Italo-Argentina de Electricidad). During the year 1916 the company completed its principal power station and installed its system in important central sections of the city. On September 15, 1916, it entered into a contract with the National Government, whereby electric energy is furnished to the port and custom house of Buenos Aires. In spite of numerous delays arising from the difficulty of obtaining supplies on account of the European War, the company was able to complete its various concessions in time to receive a stipulated bonus of \$200,000 m/n national bonds. The profits of the company for the year 1916, after deducting \$271,651 m/n, for writing off cost of installation, amounted to \$246,651 m/n, most of which was either credited to reserve or carried forward. No dividends were paid, it being thought wise to conserve resources owing to the war. Power houses and other buildings owned by the company were carried on the balance sheet at \$12,329,580 m/n, cables and installations at \$517,090, m/n. The authorized and subscribed capitalization of this company is \$5,000,000 m/n.

The Electric Company (Compañía Electricidad) of Rosario is a Belgian concern, registered in the year 1910. Its capitalization is 35,000,000 francs and its head office is in Brussels.

Among other important companies in Argentina is the Anglo-Argentine Electricity Co. (Cia Anglo-Argentina de Electricidad), incorporated in 1911, furnishing electric current to cities and towns throughout the Province of Buenos Aires, including certain suburbs of the capital. The authorized capitalization of the company is \$10,000,000 m/n, of which \$6,200,000 m/n is paid in. In 1911 and 1912 the company paid dividends of 8 per cent. each, in 1913, 9 per cent., and more since. The net profits of 1915 were \$420,655 m/n. A recent quotation for the \$100 m/n shares was \$35 m/n per share.

An important company was incorporated in England in 1911 under the name of Cía. Electricidad de la Provincia de Buenos Aires, to take over a local company of the same name. The capitalization of the company consists of £1,000,000 ordinary stock (par £4), £300,000 7 per cent. cumulative participating preference stock (par £1), and £879,300 5 per cent. first-mortgage gold bonds. These bonds, which closed at 80 per cent. on July 27, 1914, on the London Stock Exchange, were quoted at 60 in 1916. There were no sales in 1917. Dividends on the preference shares were suspended following the May, 1914, payment. This company furnishes light and power to a number of towns in the Province, including Mar del Plata, Quilmas, Junin, and San Luis.

In addition to these, other companies that might be mentioned are:

The Electric Co. (Compañía de Electricidad) of Corrientes, supplies the city of Corrientes. The capitalization of this company is \$1,000,000 m/n and the latest reported year's profits were \$56,000 m/n.

The San Carlos Electric Co. (Empresa Eléctrica San Carlos), at Bolivia, has a capitalization of \$250,000 m/n.

The Electric Light Co. (Alumbrado Eléctrico) at Río Gallegos, Province of Santa Cruz, is a new company, founded in 1915.

Probably the most successful among the several British-controlled electric light and power companies in the interior of Argentina has been the River Plate Electricity Co., whose plant is located in La Plata. The capitalization of the company consists of £200,000 5 per cent. debenture stock (par 100 per cent.)—which sold at 105 per cent. in pre-war days and in January, 1918, at 86 per cent.—15,000 6 per cent. preference shares, and 150,000 ordinary shares. The ordinary shares (par 100 per cent.) in 1912-13 sold at 262 per cent. and at the closing of the London Stock Exchange July 29, 1914, were quoted at 240. In 1916 they reached the low figure of 120, and in January, 1918, sold at about 150. Dividends paid on this stock have usually been between 7 and 10 per cent, and a substantial balance has generally been earned and carried forward. Formerly the electric lighting plant in Tucuman was owned, but this was disposed of in 1914 to the Tucuman Light & Power Co. for the sum of £34,000 cash and 66,000 in debentures.

Gas Companies.

By far the most important of the gas companies in Argentina is the Primitiva Gas Company, which furnishes the gas used publicly and privately in the city of Buenos Aires. This is a British-controlled company, its shares and debentures being quoted on the London Stock Exchange. In the days before the war the company was fairly profitable. Since that time, however, the increasing cost of fuel and supplies and the delay in collecting payments for public lighting have brought about a large decrease in net earnings.

The gas mains of the Primitiva Gas Co. on December 31, 1917, totaled 1,138 miles in length and the number of services was 201,435, as compared with 203,755 in 1914.

The South Barracas Gas & Coke Co. of Buenos Aires, and the Bahía Blanca Gas Co. are also British companies, their control and management being virtually the same. They are not large companies. The South Barracas Gas Co. is capitalized at £200,000 shares of a par value of £1. Before the war dividends averaged 4 to 5 per cent. Formerly the stock sold as high as 125s., but in January 1918, it had fallen in price to 1s. 3 d. per share. The securities of the Bahía Blanca Gas Co. have likewise fallen in price. The capitalization of the company consists of 150,000 ordinary "A" shares, par £5, and 70,000 ordinary "B" shares, par £1. The "A" shares have a priority over the "B" shares to the extent of 6 per cent, and after the "B" shares receive 6 per cent, both issues share alike in further disbursements. The company, which was registered in 1907, paid dividends of from 2 to 3½ per cent. on the "A" shares to 1911; in 1912 the dividend was passed, and thus far it has not been resumed. The "A" shares, which are listed on the London Stock Exchange, formerly sold as high as par (5).

Subways.

The splendid system of subways of which Buenos Aires is so justly proud was begun in September, 1911. The first section of the line was opened in 1913. This line extends from the Plaza Mayo, in front of the Government buildings, for 14 kilometers (8.7 miles), double tracked, passing the House of Congress and the Buenos Aires Western Railway station. Work on the section from the Retiro Station (Central Argentine Railway) has been suspended until after the close of the war. This line will connect the last-mentioned station with the stations of the Central Argentine Railway, the Buenos Aires & Pacific Railway, and the Córdoba Central Railway, as well as the banking and central business sections of the city. On the line now in operation stations are provided every three or four squares. An excellent and rapid service is maintained.

Telephone Investments.

The first company to undertake telephone development in Argentina was the Pan-Telefono Co., established in 1881. A competitor known as the Gower-Bell Telephone Co. was established the same year. In 1883 the Union Telephone Co. was formed and took over the earlier concerns. In 1886 the United River Plate Telephone Co. began operations, taking over the property of the Union Telephone Co. The "United" has continued uninterruptedly in the field since that date, although the Cooperativa Telefónica and other competitors have since been started.

The Cooperativa Telefónica, which began business in 1887, has outstanding approximately \$1,850,000 m/n shares, par \$20 m/n. The company earned a profit of \$249,935 in 1915, paying dividends of 6 per cent. on the preference shares and 8 per cent. on the ordinary shares. These are the usual dividend rates of the company.

Buenos Aires stands thirteenth among the larger cities of the world in the number of telephones installed per hundred inhabitants, its total per hundred inhabitants about equaling the totals of London and Paris.

That the telephone business in the interior of the country is good is indicated by the fact that the Compagnía General de Teléfonos, operating the telephone lines in the city of Mendoza, usually pays dividends of from 10 to 15.4 per cent. on its \$500,000 m/n. stock.

Argentine Companies.

The Argentine stock companies employ 80,470 persons, including directors, employers, and workmen, while the foreign companies employ 154,021 persons.

The Argentine commercial code requires all mercantile stock companies or societies, including mining companies operating in this country, whether created in it or not, to be registered and to publish annual reports. Moreover, according to the same code, the stock companies founded in the country, or those

formed abroad with the greater portion of their capital in Argentina, or those that have their head board of directors and their meetings of members in this country, are all fiscalized by the State. Accordingly, they must publish annual reports giving a balance sheet of assets and liabilities, their losses and profits, and a statement of the progress and condition of the company, etc.

The total assets of the foreign commercial companies are estimated as follows: Movable property, 280,609,890 pesos; real estate, 551,821,105 pesos; bonds, 59,727,279 pesos; ordinary credits, 201,072,454 pesos; mortgage loans, 377,235,569 pesos; loans guaranteed by pledge, 65,224,817 pesos. Of foreign companies engaged in industrial undertakings, the assets were as follows: Movable property, 236,810,784 pesos; real estate, 253,164,258 pesos; bonds, 26,983,529 pesos; ordinary credits, 38,975,745 pesos; mortgage loans, 467,332 pesos; and loans guaranteed by pledge, 50,000 pesos. The assets of the national companies working railway properties amounted to 22,569,780 pesos; those of foreign companies totaled 3,071,242,453 pesos.

PUBLIC WORKS

The general bureau of public works has prepared a plan for the construction of floating docks at some of the towns on the Paraná, Upper Paraná, and Paraguay Rivers, with the object of complying with the wishes of the national authorities of Formosa and Chaco territories and of the governments of the Provinces of Corrientes and Entre Ríos.

The formal inauguration of the first section of construction of the paved road to connect the cities of La Plata and Bahía Blanca took place on March 16, 1919.

The first section connects the townships of Hinoje and Olavarría, the construction starting from Hinoje.

It is reported that an airplane service will be established within a few months connecting Buenos Aires with Bahía, Brazil, and intermediate points.

WATER POWER.

Argentina is handicapped in not having available for development any large amount of waterpower. Several of the interior cities, such as Tucuman and Córdoba, have hydroelectric plants, but these are furnishing practically all the power of which they are capable. The only large waterfall is the Iguassu, half of which may be ceded to Argentina, since it is on the boundary between that country and Brazil. As was pointed out, however, this is too far away to be of any use in the industrial development of either country.

There is a great deal of interest in local manufacturing, and Government as well as private associations are attempting to increase it as much as possible. There is already approximately 130,000 horse-power in motors in active operation, and the yearly increase for the last few years has been about 6,000 horsepower. According to statistics, it would appear that there

is at least 150,000 horsepower in steam and gas engines in various industrial establishments, most of which are within the reach of central-station power.

There are two large central stations in Buenos Aires, the larger of which is a German company, with an installed capacity of approximately 100,000 kilowatts. The smaller station is owned by a combination of Italian and Swiss manufacturers, and both these central stations are practically committed to the exclusive purchase of European goods, thereby indicating again the influence of invested capital in obtaining trade for the home country. The German company also has invested approximately \$24,000,000 in other stations throughout Argentina. Its parent company owns one of the tramways in Montevideo and the central stations and tramways in Valparaiso and Santiago, Chile.

Plans are reported to be under consideration by the Argentine Association of Electrical Engineers looking to the utilization of the Iguazu Falls to the extent of 675,000,000 kilowatt hours per annum. The capital necessary to carry this project to a successful termination is estimated at 80,000,000 pesos, or nearly \$40,000,000. Under this plan Buenos Aires, Rosario and other important industrial and commercial centers are to be supplied with electricity generated at these falls. The project, up to the present time, has not gone beyond the preliminary stage.

The governor of the Province of Buenos Aires has authorized Federico Brown to install and operate 10 Electric Light and Power Plants in that Province for a period of 20 years. These installations are to be strictly modern in their entire equipment.

INSURANCE.

Marine insurance companies operating in Argentina depend largely upon local river and coast traffic for their business. This local shipping business is called "cabotaje". It includes the movement of large quantities of native raw materials from outlying districts to the country's principal markets and ports of shipments, and the reshipment of imported goods up the interior waterways and along the coast.

Another important division of the marine insurance business is that covering exports and reshipments of imported goods from Argentina to points other than the great centers of London, New York, Hamburg, etc. In these centers insuring facilities are so highly developed that it is more convenient to place the insurance at that end. However, shipments of manufactured goods and raw materials to the west coast of South America, to Japan, China, India, South Africa, etc., are more frequently covered from Buenos Aires, since the insurance business is not so advanced in those places. This business represents about 20 per cent. of the marine insurance written annually in Argentina. A small proportion of the total local marine insurance business is written on European and North American shipments, but this is much less in volume and more uncertain of execution than that from the other sources.

A flat tax of 7 per cent. is collected by the Government on all premiums received by foreign insurance companies, except on life and agricultural policies. National companies pay only 1.4 per cent. tax on their premium collections, although on reinsurance with foreign companies they have to contribute an additional tax of 5.6 per cent, from which the latter are exempted. Stamped-paper taxes are collected on all insurance policies as well. At the present time there is no tax on the profits of insurance companies, but a general income tax, now under consideration in Congress, carries a provision therefore. All companies are obliged to allow the inspection of their books annually by the Government for fiscal purposes.

At the present time there are 24 marine insurance companies operating in Argentina. Of these, 15 are national insurance companies and 9 are foreign. None is devoted solely to marine risks. Fire and marine risks form a combination which an insurance company in Argentina can usually underwrite to best advantage.

A foreign insurance company can not commence operations in Argentina until it has deposited with the Argentine Government Conversion Bureau or the Banco de la Nación Argentina bonds of the Argentine Government to the value of \$300,000 Argentine paper pesos (about \$127,380). This entitles a company to open a branch to operate in one class of risk only. Operations in another class of risk necessitate the deposit of like bonds to the value of 150,000 pesos (about \$63,690), and for each additional class of risk thereafter further deposits of 100,000 pesos (about \$42,460) worth of bonds must be made. Under the present law only Argentine Government bonds are accepted for deposit, but if a law now before Congress is approved it will be permitted to make the deposits in Argentine currency. The penalty for noncompliance with this law is 6 to 12 months' imprisonment and the closing of the office or agency.

STOCK MARKET PRICES IN LONDON.

Quotations on Argentine securities in the London Stock market on the last week of 1919:

Stocks or Shares	Class	1919 Last
Great Southern Railway	Ordinary	83½
Central Argentine Railway	Ordinary	67½
Central Argentine Railway	Df. Stock	55
Buenos Aires Western Railway	Ordinary	86½
Entre Rios Railways	Ordinary	41
Entre Rios Railways 6% Cum.	1st Pref.	79
Entre Rios Railway 4%	2nd Pref.	46½
Buenos Aires & Pacific Railway	Ordinary	67½
Central Cordoba Railway	Ordinary	17½
Central Cordoba Railway	1st Pref.	32
Central Cordoba Railway	2nd Pref.	22¾
Argentine North Eastern Railway	Or. Stock	35
Central Uruguay Railway	Ordinary	81
Central Uruguay, East. Ext.	Ordinary	8
Central Uruguay, North Ext.	Ordinary	8¾
Anglo-Argentine Tramway	5½% 2P	3¼
London & River Plate Bank	Ordinary	49

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London & Brazilian Bank	Ordinary	27
British Bank of South America	Ordinary	21 1/4
Anglo South American Bank	Ordinary	11 1/4
Primitiva Gas Company	Ordinary	1 1/4
Primitiva Gas Company	5% Pref.	3 1/2
Forestal Land, Timber & Rly. Co.	Ordinary	45/6
Forestal Land, Timber & Rly. Co.	Pref.	36/—
Argentine Northern Land	Ordinary	16/—
British & Argentine Meat Co.	Ordinary	26/6
British & Argentine Meat Co.	6% Pref.	23/—

Quotation in the Buenos Aires Stock Market.

The following is a list of the quotations in the local Stock Market in Buenos Aires on the last week of 1919.

Azucarera Argentina	102.00
Azucarera Tucumana	—
Refineria Argentina	—
Sansinena Carnes Congel	151.50
Smithfield and Arg. Meat	—
Mercado Central de Frutos	39.00
Puerto San Nicolas	20.00
Muelles de la Plata	—
Catalinas Warehouses Moles	5.50
Astra, Cia Arg. de Petróleo	68.50
Cia Argent. de Com. Rivad	75.00
El Globo Destileria, etc.	—
Cerveceria Palermo	—
Cerveceria Rio Segundo	—
La Martona Lecheria, etc.	—
Introduc. de Buenos Aires	90.00
Industrial Paraguaya	—
R. P. Quebracho Company	—
Campos, etc., Puerto Sastre	3.30
Quebrachales Fusionados	82.00
Soc General Pobladora	—
Guatraché Lanu Co.	—
Tieerras del Oeste	—
Quebrachales Paraguayos	—
Gas de La Plata	—
Anglo Arg. de Electricidad	—
Cia. Industrial Electricidad	—
Franco-Argentina, Seguros	145.00
La Edificadora	—
Argentina de Edificación	65.00
Primitiva de Bolsas	200.00
General de Fósforos	570.00
Argentina de Papel	—
Fabrica de Papel (Casati)	—
Salinas Hnos. (Bolsas)	350.00
Fund. y Talleres La Unión	—
La Ibero Platense	—
Bodegas Tombs	—
M. S. Bagley & Cia., Ltda.	—

MEASURES AND WEIGHTS.

The Argentine Republic adopted the metric system in 1863, and 14 years later a law fixed the basis of its practical application, though it was not until the following year that its rules of working were fairly established. While the metric system is legal, it is only compulsory in Government departments, and a number of the old Spanish measures still survive.

While the Spanish measures prevail in many lines, the sizes of wearing apparel are always given in centimeters, canned

goods are quoted in kilos, and lumber measurements are on the metric basis. Quotations on paper should give weights and measures in metric units, as the use of inches to designate sizes and pounds to designate weight is almost a complete bar to sales.

LIST OF PRINCIPAL DEALERS IN ARGENTINA.

Musical Instruments.

Salvador Arraizza, Santiago del Estero 1952; José Corleto, Vera 301; Luciano De Muro, Santa Fé 2532; Vicente Filardi, Belgrano 2568; Hnos. Geipel, Corrientes 1776; Samuel Kohan, Brasil 1070; Domingo La Salvia, San Juan 2220; Camilo Mandelli, Paraná 649; Guillermo Neumann, Florida 415; J. Perellano, Rivadavia 6832.

Furniture.

Acosta y Co., Reconquista 46; Cecilio Bachoer, Rivadavia 8047; Victorio Cantia, Australia 2041; "Casa Guerra," Corrientes 967; F. R. D'Alessandro, Sta. Fé 3414; Francisco Di Lorenzo, Cangallo 815; Antonio Estrada, Luca 1573; José Farber, Rivadavia 3659; Francisco Garaguso, Av. San Martín 2043; Miguel Grampa, Patricios 741; B. Huberman, Sta. Fé 4914; Evaristo Iglesias, Perú 578-80; Vicente Roque Jeraci, Belgrano 2875; Francisco Innago, Sta. Fé 1186; Keller y Co., Sta. Fé 800; Juan Lemme, Corrientes 4338; Adolfo Machin, Bdo. de Irigoyen 1518-20; Fernando Orioli, Paraná 1037-45; Carlos Pampe, Suipacha 927; Juan Romani, Libertad 928.

Chemicals.

Enrique Beautemps, Cochabamba 1158; J. M. Brodin, Victoria 2075; Charpentier y Co., Lacar 2663; Drogueria de la Estrella, Ltda., S. A., Saavedra 41-97; S. Garrido, Rincón 125; Hallé y Co., Rivadavia 1365; Juan S. Jaca, Liniers 227; Guillermo Klockmer, Lalle 477; "La Farmaco Argentina," Acoyte 130; Albet George Morris, Méjico 1200; Pablo Oehrtmann, Cochabamba 2147; José M. Palma e Hijo, Bolívar 373; Hnos. Roseld, Pavon 2233; Shore y Soler, 25 de Mayo 268; The American Fruit, Tacuarí 743; Varando P. y Co., Andes 650; A. L. Washington, Cangallo 4281.

Druggists.

Eduardo Ambrosetti, Alsina 501; Leonardini Beretervide y Co., Piedras 156-70; A. Calandra, San Juan 701; Delfino y Co., Charcas 1371; Enríque D'Abondio y Co., Charcas 1228; Roberto F. Enz, San José 1744; Enrique Franco, Paraguay 2299; Diego Gibson, Alsina 397; Hallé y Co., Rivadavia 1365; Sem Leon, Bolívar, Bolívar 373; Atilio Massone, Junín 863; José Nava, Sta. Fé 1697-99; José Gómez Patiño, Moreno 2299; Julio Poncet, Viamonte 302; Eduardo Retienne, Sarmiento 1127; José Rosa, Cabildo 2102; Alberto J. Schivo, Rivadavia 2601; Eudoro G. Torres, Merlo 2500; J. R. Uriz, Brasil 501; Enrique Valsechi, Suipacha 331.

Plumbing Supplies.

Alejandro Cocucci, Córdoba 1-41; Alejandro Golven, Suipacha 674; José N. Consentino, Malavia 1156; Carlos Fiz, Lobos 1970; Luis Salussojila, Sarmiento 465; Hnos. Doselli, Rivadavia 2150.

Paint and Varnishes.

José Abalza, Honduras 5254; Alejandro Barcellona, Avilés 3155; Juan Cami, Córdoba 3084; Nicolás D'Amato, Directorio 414-18; Españadero Asplazo y Co., Rivadavia 3001-15; M. Faraone, Garmendia 4941; E. Galvusera y Rimoldi, Corrientes 2652; Munch F. Harboe, Chacabuco 860; Inchasusti Hnos., Lope de Vega 1217; Juan A. Junco y Co., Viamonte 2702; Victor Kuen, Pedro Lozano y Tinogasta; Antonio Leidl, Cerrito 733.

Stationery and Books.

Joaquín Abalo, Estados 3669; Francisco Allanelli, Mendoza 2446; Juan Biasi, Moreno 1567; David Alberti, Santa Fé 3501; José Alberti,

Santa Fé 3601; José A. Caborno, C. Pellegrini 1135; Miguel Cavello, Belgrano 949; Carlos M. Carrere, San Juan 3240; Alejandro E. Davidson, Victoria 4001; Bernardino Descola, E. Unidos 1499; Luis Dueñas, Nogoyá 3186; G. Escoto, Lavalle 12; Braulio Etchegaray, Pedro Lozano 3212; Balbino Faba, Paseo de Julio 454; José Famulare, Boedo 1197; Antonio Farreras, F. Lacroze 3170; Marcelino Fernández, Viamonte 1690; José Gabarró, Gral. Soler 4402; Pablo Gadola, Rivadavia 775; Armando Hoogen, Boedo 735; Miguel Hurtado, Av. San Martín.

Men's Furnishings.

Pedro Adanero, Defensa 1140; Mendez y Alonso, Cangallo 1078; Juan Bonelli, B. de Irigoyen 190; José A. Cancelera, Rivadavia 6670; Agustín Caballero, Brasil 1074-78; A. De Micheli y Co., Av. de Mayo 1001; Alberto Duran, Sarmiento 780; Carmona M. Fernández, Corrientes 1794; Ambrosio García, San Martín 176-78; Luis Gavi, Entre Ríos 2060; Emilio Jori, Entre Ríos 569; Félix Iqola, Rivadavia 2560; L. Laboria, C. Pellegrini 80; José Lillo, Viamonte 1001; Juan Maero, Rivadavia 7655; Carlos Menéndez, Corrientes 3433; Gabriel Ortega, Córdoba 682; Puig y Co., Rosario 899.

Perfumes.

Erasmí Viva, Irala 135; Pedro Hernández, Loyola 701; Ernesto Mame, Tucuman 646; Vda. de Espiasee, C. Pellegrini 436; A. Morelli, Lima 7; Tomás Repetto y Co., Piedras 182; Blas Santalanni, Directorio 327.

Women's Furnishings and Millinery.

Elvira Acosta, San José 249; Enriqueta Bayla, C. Pellegrini 976; Luisa Caldas, Bernardo de Irigoyen 258; Emilia Cánepa, Córdoba 3955; Florinda F. de D'Angelo, Defensa 894; Lina de Blase, Rivera 250; Carmen Eboil, Córdoba 3785; José Fernández, Suipacha 526; Rosario Gaby y Co., Viamonte 668; Florinda Harrods, Rivadavia 3383; Elena de Soeu, Lavalle 901; Manuela Iturrios, Rivadavia 654; Angel Janpolzk, Moldes 2078; C. H. Krimer, Lavalle 2022; A. Lavorda, Chile 1020; Celina Labruni, Rincón 246; Simón Mabé, Ascuena 750; Manuel Mata, San Juan 1811; R. F. de Nacarato, Belgrano 3045; María y Ana Oddona, C. Pellegrini 588.

Watches and Jewelry.

F. Abrate, Sarmiento 629; Daniel S. Bachini, Lima 1150; Vicente Calmi, Velazco 776; Hnos. Dabusto, Cangallo 1987; Rafael Emanuel, Triunvirato 745-49; Ernesto Fachini, Varela 87; Cesar Gallo, Uruguay 672; Lorenzo Herreria y Co., Belgrano 3024; Augusto Insua, E. Ríos 363; Jaquier y Co., Cangallo 788; K. H. Karam, Reconquista 972; Alfonso Laguna, Cavia 3082; Luis Macchi, Larrea 961; Ezequiel Navarra, Rivadavia 10829; Hércules Orlo, Canning 1814; Hnos. Pajés, Esmeralda 856; F. Cuarenta, Cochabamba 2179; Nicolás Rallo, Corrientes 865; Alberto Samuel, Cangallo 600; Pablo Tardito, Sarmiento 1232.

Accessories and Material for Automobiles.

Hnos. Alvarez, Sarmiento 2402; G. Bartelli y Co., Sta. Fé 2584; R. Casas, Tacahuan 888; Carlos Delfino, Venezuela 3227; F. Spindola, Córdoba 2502; Manuel Galloso, Junín 1119; Leon Hepner, Córdoba 2302; Pedro Kass, Paraguay 2632; José Lazara, Rivadavia 6640; Alberto Molinari, Callao 1062; José Otino, Lavalle 1535; Alejandro Passeri y Co., Cangallo 2012.

Importers of Machinery.

Dillenius y Co., Libertad 40; Carlos Pagni y Co., Cangallo 1462; Técnica y Comercial, S. A., Chile 760-68.

BOLIVIA.

It is the largest of the West Coast countries, but very thinly populated. It has no port of her own. It is the third largest country in South America. There are 708,195 square miles of mineral and agricultural lands within its boundaries, of a territory equal to all the American states east of the Mississippi, with the exception of New England. Its area, compared with European countries, is three and a half times that of France. England, Austria, and Germany combined would not be as large as Bolivia's territory.

It is bounded on the north and east by Brazil; by Paraguay on the southeast; by the Argentine Republic on the south, and on the west by Chile and Perú. International treaties provide the right of way to and from Bolivia through the territory of neighboring republics.

AREA AND POPULATION.

The area and population, and the different political divisions are shown in the following table:

Departments and Territories	Area square miles	Census 1900	Estimated 1915	Per Square mile 1915
La Paz	40,686	455,616	726,357	9.60
Cochabamba	25,298	328,163	534,901	19.33
Potosí	45,031	325,615	530,748	7.70
Santa-Cruz	144,941	209,592	341,640	1.70
Chuquisaca	36,132	204,434	333,226	1.03
Tarija	31,567	102,887	164,704	1.68
Oruro	20,657	86,081	140,891	5.25
El Beni	95,354	32,180	53,450	3.60
El Chaco	46,561	13,085	82.5
Colonial Territories	27,928	10,000	51,968	3.09
Total	514,155	1,744,568	2,889,790	3.38

In 1900, the Indian population of Bolivia was 920,864, or 50.9 per cent. of the whole; the mixed was 486,018, or 26.7 per cent.; the white, 231,088, or 21.7 per cent.; the negro, 3,945, or 0.21 per cent.; and the unclassified, 170,836, or 9.4 per cent. Of the population not under 7 years of age, 564,000 were engaged in agriculture; 399,000 in the industries; 55,521 in mining, and 3,106 in artistic professions. The foreign population numbered 7,425, of whom 2,072 were Peruvians.

The estimated population, in 1915, of the principal cities

was: La Paz (the actual seat of government), 100,097; Cochabamba, 31,014; Potosi, 29,795; Sucre (the capital), 29,686; Tarija, 10,159; Oruro, 22,573; Santa Cruz, 7,734; Trinidad, 6,096; Cobija, 500; Yacuiba, 1,014.

POLITICAL ORGANIZATION.

The Constitution of Bolivia is very liberal. It guarantees, among other rights, freedom of the press, speech, and religion; any person, whether citizen or foreigner, may acquire, hold, and dispose of property; the sovereignty resides in the people, and its exercise is delegated to the executive, legislative, and judicial departments of the government.

The first is vested in a President and two Vice-Presidents, who are elected by popular vote for a term of four years. The President cannot be re-elected, but a former chief executive may be re-elected after another administration has occupied a presidential term.

The cabinet officers, six in number, are selected by the President. The cabinet minister under whose jurisdiction the matter falls, must countersign every order of the President. The National Congress meets each year at La Paz on August 6, when the President and members of the cabinet present detailed reports of the work of their respective offices. Accounts of the revenue and expenditures, together with the proposed budget for the following year, are laid before Congress.

The Legislature is composed of a Senate and a House of Representatives. There are 16 Senators and 72 Representatives elected by the people, the latter chosen for a term of four years, and the former, elected for six years, renewed by thirds every two years.

The Judiciary is composed of a Supreme Court, having 7 members or judges. The judges are elected by the House of Representatives upon lists proposed by the Senate, for a term of ten years. The Judges of the various other lower courts serve but four years. The Supreme Court holds its session in Sucre.

The head of each of the eight political sections, called Departments, is known as a Prefect, and is appointed by the President. The Departments are further divided into Sub-Prefectures, of which there are several in each Department. The smallest divisions are called Cantones and are governed by a Corregidor. All of these officials form part of the executive branch of the government and are subject to the orders of the President.

The Municipalities are autonomous and collect and disburse their own revenues; the disbursements being devoted to local interests, such as markets, public health matters, street cleaning, hospitals, primary schools, and other home institutions.

The Consejo Municipal is the body which administers the affairs of the cities. The members are elected by popular vote and half of them are renewed annually.

The right of vote is accorded to all male citizens over 21

years of age, who can read and write, have a fixed income, and whose names are duly recorded in the official registers.

A law enacted by Congress and promulgated in December, 1917, established the provinces of Los Andes, in the department of La Paz, and of Tomina, Zudañez and Azurduy, in the department of Chuquisaca. The capital of the province of Los Andes, is at Pucarani; that of Tonina, at Padilla; those of Zudañez and Azurduy at the towns of their respective names. The provinces of Tomina, Cudañez and Azurduy are entitled together to one representative in the National Congress.

PERSONNEL OF THE GOVERNMENT.

The President of Bolivia is José Gutiérrez Guerra, who was inaugurated August 15th, 1917.

A new Bolivian cabinet was formed in January, 1919, to strengthen the Government in view of the differences between Chile and Peru over the provinces of Tacna and Arica. The members were:

Minister of Foreign Affairs, Alberto Gutiérrez.
Minister of the Interior, José Luis Tejada.
Minister of Education, Daniel Sanchez Bustamante.
Minister of Finance, Darío Gutiérrez.
Minister of Public Works, Ricardo Martínez Vargas.
Minister of War, José Santos Quinteros.

On March 21, 1919, the President of the Republic made the following cabinet changes: For Minister of Foreign Relations, señor Darío Gutiérrez; Minister of Public Instruction and Agriculture, señor Luis Zalles C.; and Minister of the Treasury, señor José Luis Tejada.

On the 6th of January, 1919, in Buenos Aires, a treaty of frontier patrol was signed between Argentina and Bolivia. The convention stipulates reciprocal response from the border guards at the first alarm along any point of the frontier. The police may cross the frontier of the neighboring country only to effect immediate capture of a known marauder and safeguard the interests of the citizens in both countries. Military garrisons are authorized to detain suspects until their presence may be explained satisfactorily and the reasons for their crossing the frontier made clear; in every case indictments must be sent to the country from which the suspects came and telegraphic reports be procured before allowing them to proceed.

On April 12, 1919, a central treaty of arbitration was signed in Caracas between Bolivia and Venezuela by which the contracting parties agree to submit to arbitration questions of whatever nature that may arise between them, providing that by diplomatic channels a direct solution is not arrived at, and also excepting cases in which the jurisdiction of regular Bolivian or Venezuelan courts of justice is not called in question. The arbiters shall be selected from the secretaries of state of the American Republic, or, when necessary, from American lawyers. In case of disagreement as to the election of arbiters the contracting parties shall appeal to the permanent court of The

Hague. In every case which arises an agreement shall be signed which sets forth the nature of the case, the constitution of the tribunal, and the rules of procedure to be followed. The convention will remain in force for a period of 10 years, and, if not denounced by either party, will be considered renewed for an equal period.

On May 18, 1919, the election of Senators and Deputies was held.

The last Presidential election took place on May, 1916. The total number of votes cast was 86,684, of which 76,732 belonged to the Liberal Party and 9,952 to the Republican Party.

A RUGGED COUNTRY.

The ruggedness of the surface of Bolivia, which lies wholly within the tropics, from the high table-lands to the far eastern jungles, provides a great variety of temperatures. In La Paz and Potosí, for instance, which are respectively 12,500 and 14,000 feet above sea level, the midday sun is quite warm and often hot, but with the coming of the night the air quickly cools.

From north to south the whole length of Bolivia two great chains of the Andes extend, dividing the country into many natural valleys and basins. The Bolivian table-land, comprising about 65,000 square miles, lies between the two principal ranges. It is a territory as large as the State of Massachusetts, and has an average elevation of 12,000 feet above sea level.

Eastern Bolivia, contrasting with the high plateau region where the population is greatest, stretches for hundreds of miles in vast and undulating plains. Much of this land remains in the virgin state, and thousands of wild cattle roam at will over grassy pampas and unexplored forests. The rich deposits of mineral wealth are in the high plateau. The eastern region will in time become an active agricultural and stock-raising center.

The country has no sea coast, but by its navigable rivers has a direct outlet to the Atlantic Ocean by way of the Amazon River.

CLIMATE.

Although Bolivia lies between the Tropics, its climate varies greatly owing to the difference of altitude. The main temperature of the low lands up to an altitude of 2,000 feet sea level is 74° F.; up to 8,000 feet, 63° F.; and in the central plateau situated between 10,000 and 13,000 feet it is only 50° F.. A drop of one degree is figured for every 181 meters ascent. Owing to this peculiarity, all the products of the tropical and temperate lands are found in Bolivia.

It may be said that Bolivia knows only two seasons in the year; summer, or rainy season, lasting from December to May, and winter, or the dry season, from May to December. The climate of the altitudes is dry, healthy and invigorating.

GOLD.

The distribution of the metallic belts in Bolivia has always been a matter of wonder to geologists, Raimondi having made the statement that the Bolivian plateau "is a silver table supported by gold columns."

The gold-bearing belt of the country is divided into three regions. The first extends from the western boundaries of the Republic in the Inambari basin to the eastern frontier of the upper Paraguay. This region embraces the whole mountainous section of the Provinces of Caupolicán, Muñecas, Laracaja, Cercado, Yungas, Inquisivi, and Loaliza in the Department of La Paz; thence it continues through the Department of Cochabamba, and ends at the Santa Cruz Paraguayan boundary.

The second region starts in López, extending south through the Provinces of Chayanta, Sur Chichas (Department of Potosí), Méndez (Tarija), Cinti and Acero (Chuquisaca), as far as Santa Cruz plains. The third region which perhaps is the richest, extends toward the northwest of the Republic, as far as Carabaya, Perú, and the head of the rivers Madre de Dios, Acre and Purus.

For centuries the placers of Tipuani and Suches have drawn the attention of prospectors and at present, among the hundreds of mining concessions, are foremost.

Not all the placers and mines referred to are under actual exploitation, many of them being idle because of the lack of capital, and thus affording a good opportunity for new applicants for mining concessions.

The amount of gold exported from Bolivia cannot be determined exactly, because most of the production is smuggled out to avoid the payment of the small tax of twenty cents on each ounce exported.

There are, besides, the large mines in actual operation, hundreds of new mines, all of them very rich in tin or copper, silver, gold, wolfram, bismuth, etc., in the possession of the original prospectors, who have no money to invest in machinery and cannot pay the amount of labor necessary for the rapid development of their mines; and work is carried on only on the smallest scale and with the most primitive methods.

During the last few years the average production of gold in Bolivia has been in excess of 300 kilograms annually, valued at 572,000 bolivianos.

The Spaniards looked only for gold, silver and a little copper, and worked only the richest veins, leaving all others untouched. Tin they used only to cover the excavations made to get the finer metals, and the other minerals so highly appreciated today meant nothing to them. In fact, in many cases this industrial value has only been discovered during the last few years.

MINING.

After long periods of decadence and paralyzation, due to wars and revolutions, a tremendous change has come over the mining industry. Today silver does not represent to Oruru

half the value of other ores. Tin, wolfram, zinc, nickel, copper and many other minerals have as great a demand. (For a complete description of the Oruru mining region, see Latin American Year Book for 1919, pages 73-76.)

By presidential decree of February 13, Chayanta Province in the Department of Potosi will comprise a mining district within the present political boundaries. On June 1 of the year 1919 the new mining district was appraised and assessed for taxation.

In the vicinity of Tarabuco rich deposits of corundum and other precious stone have recently been discovered. Many requests for permits to exploit the minerals have already been presented to the Prefecture of the Department. Corundum in its crystalline state is the second hardest substance to the diamond.

By a recent presidential decree the beds, strata, or seams of saline deposit are declared Government property, including nitrates, carbonates, and other inorganic material of similar properties in the Department of Cochabamba. The decree does not limit their use as established by custom, and does not interfere with the industries at present engaged in their exploitation. The execution of the decree is left to the Minister of Industry.

During the year 1918 there were 3,418 tons of tungsten exported from the country, officially valued at 10,640,392 bolivianos in 1917. The 1918 exportations of tungsten was distributed in the following manner: United States, 2,328 tons; Great Britain and France, 437,367 tons therefore remained at the ports of embarkation and en route. From 1909 to 1918 Bolivia exported 12,831 tons of tungsten ores, valued at 30,-458,161 bolivianos.

Before, during and after the war Bolivia has been exporting large quantities of minerals. Tin is the most important mineral resource of the country. In 1919, for the first three months of the year, the quantity of tin exported reached 10,657,144 tons. In the corresponding period of 1918, 11,037,372 tons were exported. There is a difference of 380,258 tons in favor of 1918. The value of the tin exports for the first months of 1919 was Bs. 20,874,441.42. The value of the exports for the corresponding period in 1918 was Bs. 27,176,341.63. There is consequently a difference in favor of 1918 Bs. 6,301,900.14, which is explained by the prices in London. The average price in 1918 was £307.11.0 while in 1919 it has only attained £240.09.0.

A new tax on mining profits was established by law of Jan. 1919, by which every individual, company, or society exploiting one or more mines of whatever nature must pay to the national treasury 8 per cent. of their net profits, with the exemption of those enterprises whose net profits do not amount to 20,000 bolivianos annually. Companies paying 2 per cent. on their dividends are exempt.

An additional duty of 40 cents has been levied on exports made through all the custom houses of the Republic, of every hundred kilograms of tin, silver, bismuth, and tungsten sent

from the Department of Potosí and Oruro. (For details of mining law see Latin-American Year Book for 1919, pages 78-79).

OIL.

Numerous traces of oil have been found in Bolivia, and hopes are entertained that from the petroleum discoveries will come the solution of the fuel problems of the Republic.

The petroliferous fields of Bolivia, situated in the Andean district, lie along the southeastern frontier of the country, and indications are quite continuous in the belt extending northwest and southeast through a distance of 150 miles (241 kilometers) as far as the Argentine boundary at Yacuiba. The zone is a diagonal one, traversing the eastern Province of Santa Cruz, Sucre, and Tarija, between 63° and 64° west longitude and 19° and 22° south latitude. According to M. A. Bakusín in the "Troudi" of the Grosny branch of the Russian Technical Society, published in 1913, there are at least three fields, viz: (1) Piena, (2) Kuarazuti, and (3) Lomas de Ipaguaciu. The productive formations are supposed to extend from near Santa Cruz in the center of Bolivia, southward through Saucos to Piquirenda, Plata, and Guarazuti, in the Province of Tarija and into northern Argentina.

According to the Pan American Bulletin, "careful geologic investigations of the eastern slope of the Bolivian Andes confirm the claim that a petroleum belt exists along the entire range of these mountains for Yacuiba to the Madre de Dios River."

The Pan American Bulletin mentions a narrow belt in eastern Bolivia, on the foothills of the Cordillera Real, "extending in the direction of Santa Cruz, to the village of Monte Agudo, a distance of some 300 miles." Indications are also reported in the Beni district. In view of the cumulative evidence, it seems likely that Bolivia will some day be a great producer of petroleum.

The existence of oil has long been known from seepages, and recently these have been found to occur continuously along a belt extending northwest-southeast, over 150 miles down to the Argentine boundary to Yacuiba. Thus the petroliferous zone extends diagonally across the Provinces of Santa Cruz, Sucre, and Tarija, between 63° and 64° west longitude and 19° and 22° south latitude, and thence far into Argentina.

A report made by Director General Barret, of the Pan American Union, states that the Espejos (Mirrors) Spring, 36 miles from Santa Cruz, is a fair sample of the character and kind of surface indications in the region between the northern boundary of Argentina and the Madre de Dios River in northern Bolivia. This river is close to the southern boundary of western Brazil, and with the Beni, into which it runs, finally joins the Mamore River to form the Madeira.

Little is known of the quality of Bolivian petroleum, but some analysis show an extremely high percentage of lubricating substances. The oils so far recovered vary in composition from those of asphaltic base with specific gravity of 0.975 (13.5° B₆.)

and containing 4 per cent. gasoline to an oil of 0.819 specific gravity (43° Bé.) containing 40 per cent. gasoline. The heavier oil is confined in the lower sands. Along the eastern base of the Andes the petroleum is high-grade, from 35° to 47° Bé.

According to the Pan-American Bulletin, in reference to the petroliferous belt from Ayacuiba to the Madre de Dios River, "the Espejos petroleum spring, 12 leagues from Santa Cruz, is a fair sample of the quality of petroleum encountered in the belt referred to. Oozings taken from the surface flow of this spring, according to the recent analysis made in London, contain 78.2 per cent. of kerosene, 17.5 per cent. of lubricating oil, and 4.3 per cent. of coke. No shafts have been sunk in this neighborhood, but the indications would seem to argue that gushers may be found by boring to the proper depths. Up to the present time the Espejos spring remains unexploited."

Pools of relatively pure oil and also of "pitch" exist in eastern Bolivia, on the foothills of the Cordillera Real. These indications extend in the direction of Santa Cruz to the village of Monte Agudo, a distance of some 300 miles (483 kilometers). This oil-bearing belt appears to be comparatively narrow. Similar indications are reported in the Beni district, but they are less well known.

AGRICULTURE.

The rather rudimentary agriculture of the country is at present limited to the production of coca, food of the Indians and used for the extract of cocaine; coffee, cacao, sugar-cane, tobacco, rice and quina. The great territory has also splendid lands for cattle-raising, and this industry is considered very promising. As soon as the railroad connection with Argentina is established, Bolivia will free herself from her actual dependence upon other countries for foodstuffs and other necessary articles.

Llamas and sheep thrive in the highlands of Bolivia; the former are generally employed as beasts of burden, the horse and the mule not being so well adapted to hard mountain climbing as this sure-footed beast.

It is estimated that Bolivia has about 400,000 llamas, and they are worth \$4 to \$10 each. They are also valuable for their wool, flesh and bones, while their manure is used extensively for fuel.

The alpaca also thrives in the same region, and there are probably 200,000 of these animals, each producing 10 to 15 pounds of wool in two years. The alpaca is worth from \$50 to \$75. This wool producing industry would be placed on a very profitable financial basis by capital and good management.

With a view of encouraging the raising of horses and mules to supply mounts for the army, without the necessity of purchasing stock outside of the country, on April 20, 1919 the President issued a decree inviting the proprietors of ranches and concessionaires of pasture land to present bids to the government for the establishment of stock farms on modern scientific basis. The Government will advance a stipulated sum as a bonus for each

animal reared, for a period of four years, and agrees to begin buying stock at the fifth year, purchasing from each farm not less than 100 head annually, at the regular market price.

A report from La Paz under date of February 20, 1919 said that the rainy season has been so dry that the crops were in a very poor condition. A saving rain fell on the 18th, which resulted in the production of about half of a normal crop. This is true particularly of potatoes, the staple food of the country. In the irrigated sections there was about a 20 per cent. loss. Replanting of potatoes took place in certain sections. Poor crops will have a very material effect on the importation of dry goods and all other merchandise sold to the Indians and Cholo class, about three-fourths of the population.

INDUSTRY.

Owing to her isolation from the rest of the world, Bolivia has had no chance of developing her industries to a large extent, despite the fact that raw material is abundant, labor cheap and water power available.

The National Congress approved the law submitted by the president by which 50 per cent. of a capital of 300,000 bolivianos is guaranteed for the establishment of a Rubber Goods Factory in Santa Cruz or Cochabamba.

Bolivia grows very little wheat and has no flour mills. Flour is imported principally from the United States and Chile. In 1917 the imports of wheat flour were 23,757 tons valued at \$1,529,426.

Flour of all kinds is dutiable at 10 per cent. ad valorem.

The United States supply 60 per cent. of the total imports as against 30 per cent. from Chile.

The cheaper grades of bread are made with an admixture of corn flour. Ordinary bread is made in the same manner as in the United States.

The most important foreign concerns engaged in industrial enterprises in Bolivia are:

The Electric Light and Power Company of Cochabamba, with headquarters at Bolivia. Capital, 5,000,000 Bolivianos, of which 1,015,000 Bolivianos has been paid.

The National Match Factory of Bolivia, Ltd., with main office in London. Capital, \$400,000 (American money).

RAILROADS.

The length of Bolivian Railways in operation at the beginning of 1919 was 1,689 kilometers, while those under construction had a length of 571 kilometers, as is shown in detail as follows: Lines in operation: The Antofagasta & Bolivian Railway Co., Antofagasta to Oruro, 486 kilometers; Viacha to La Paz, 29 kilometers; and the Kenko Branch, 8 kilometers, or a total of 523 kilometers. The Huanchaca Bolivia Co., branch of the principal line, Antofagasta, Uyuni. Huanchaca, 38 kilometers. The Bolivian Railway Co., Viacha-Oruro, 202 kilometers; Rio Mulato-Potosí, 174 kilometers; Oruro-Cochabamba, 205 kilometers; and

Uyuni-Tupiza to Atocha, 90 kilometers, or a total of 671 kilometers. Electric Light & Power Co., Quillacollo-Cochabamba, 18 kilometers, and La Paz Railway, Arica Alto de la Paz, Bolivian section 233 kilometers. The Peruvian Corporation, Gnaqui-La Paz, 98 kilometers. Simon I. Patiño, Machacamarca to kilometer 40.4 Corocoro branch (property of the State); branch of the main line from Arica, 8 kilometers.

The lines under construction were: Simon I. Patiño, Machacamarca-Unicla, 64 kilometers; State railways, La Quiaca-Tupiza, 100 kilometers; Potosí-Sucre, 178 kilometers; La Paz-Yungas, 125 kilometers; Uyuni-Tupiza (nearly completed), 104 kilometers, or a total of 507 kilometers.

Over 400 miles are under construction, 480 miles have been surveyed and over 1,500 miles are projected. Among the most interesting projects are the following:

The Madeira-Marmore Railway will probably have over 100 miles of track in Bolivian territory.

A British concession for a line between Santa Cruz and Yacuiba has been held up pending the completion of the Argentine Railway to Embarcación.

A Buenos Aires firm holds a concession for a line between Santa Cruz and Puerto Suarez, which will link up central Bolivia with the River Plate and the Atlantic.

The Cochabamba-Chimore, 240 miles long, will open up fine country.

A contract was signed in 1918 in Bolivia for the construction of a railway from the existing system of Yungas to Coroico and thence to the Beni River.

In accordance with law of December 3, 1918, a technical commission has been organized to make the necessary surveys for the location of the Cochabamba-Santa Cruz Railroad, there being three possible routes from which to choose.

The government-subsidized automobile service is running cars regularly between the following points: Atocha, Tupiza and La Quiaca; Potosí and Sucre; Sucre and Cochabamba; La Paz and Achacachi; and Cochabamba and Totora.

The department of finance advised recently the four national banks of its desire to obtain funds for the continuance of construction work on the Potosí to Sucre railway by the sale to or taking over through them of an issue of bonds to the amount of 7,000,000 bolivianos. According to an estimate of engineer Milner, the total cost for completing this railway, including an expenditure for rolling stock of 650,000 bolivianos, is, approximately, 19,431,165 bolivianos. The amount expended on the line at the time the estimate referred to was made was 2,905,000 bolivianos, so that the sum now required to build and equip the road to Sucre is estimated at 16,526,165 bolivianos. It is thought that the proceeds of the issue of 7,000,000 bolivianos in bonds will be sufficient to lay the rails to kilometer 115 in the vicinity of Pampa Tambo, or Vila Vila, some 20 kilometers from the point indicated on the survey for the crossing of the Pilcomayo River. The Vulcan Iron Works recently shipped a large locomotive to be used in the construction work of the

Potosí to Sucre Railway. This engine arrived, was set up in the shops of the Bolivian Railway Co. at Uyuni and is now being utilized in construction work.

The La Paz-Yungas Electric Railroad is being constructed by the Bolivian Government with funds largely raised through a \$2,400,000 loan made about two years ago in New York. It has some very steep grades in the vicinity of La Paz, and in reaching the top of the Sierras. It is intended to extend this line to Rurrenabaque, near the head of navigation of the Beni River.

An electric line known as the Cochabamba, Vinto, Cliza Tramway, controlled by local capital at Cochabamba, has been completed for more than forty-five miles and additional mileage to a total of fifty-five miles is under construction.

PUBLIC UTILITY COMPANIES.

Electric lighting plants exist in about a dozen towns, and tramways in three or four.

The Bolivian & General Enterprise Co., control and operates the tramways, electric-lighting system, and telephone service at La Paz. The company, which is owned almost wholly by the French munition-making firm of Creusot & Schneider, was originally incorporated for the purpose of exploiting and developing rubber in far eastern Bolivia. Following the collapse of the rubber boom this concern obtained the public-utility franchises in La Paz. Power is obtained without difficulty from the river that flows down from the Alto. The tramway line, single track with sidings for passing purposes, runs from the railway station on the outskirts of the city to the main plaza, thence down the heavy grade to the Prado or residential section. The line is approximately 3 miles in length, and 8 cars, all of American manufacture, are in regular use. The local first-class fare is high, 0.20 boliviano (8 cents), and the second-class rate is 0.10 boliviano (4 cents). The cars do not seem to be heavily patronized. The cost for electric service, especially for cooking, is said to be excessive, and as a result electricity is used for practically no other purposes than lighting. The telephone service is good and fairly reasonable. No statement of earnings and profits is made public, but it is understood that dividends are not paid on the present capitalization.

The previously mentioned interurban line terminating at Cochabamba is operated by the Electric Light & Power Co. (Sociedad de Luz y Fuerza Eléctrica), of Cochabamba. This light railway, which also radiates through the city is of 2½-foot gauge, and operates to the towns of Arani, Vinto, Puneta, Tarata, and Cliza. The company also furnishes light and power to Cochabamba and these other towns, and operates a flour mill at Cochabamba. The company has outstanding £300,000 6 per cent. preferred stock, guaranteed for 25 years by the Government of Bolivia, and £100,000 common stock.

At Sucre, the nominal capital, the light and power franchise is held by the Empresa de Luz y Fuerza Eléctrica. This company is owned, practically in its entirety, by an individual. At

Oruro a local company, the Empresa de Luz y Fuerza Eléctrica, has the lighting franchise for the town and for the public. Oruro was the second city in Bolivia to install electricity. A mule tramway has long existed in the city, but it is seldom, if ever, used today. The telephone system is controlled by an individual firm, Peña & Co. The city of Tarija is lighted by gas and electricity and obtains a supply of good water from Erquis, 6 miles away. Potosí is electric lighted and receives its water supply from 22 to 32 original reservoirs built by the Spaniards in the sixteenth century on the hills above the city.

The Sociedad de Luz y Fuerza Eléctrica of Cochabamba operates the previously mentioned interurban line terminating in Cochabamba and also furnishes light and power to the towns along the line,—Aramí, Vinto, Puncta, Tarata, and Cliza. Its power is supplied from a hydro-electric station on the Chocaya river. Its capital is £400,000, held locally.

The Empresa de Luz y Fuerza Eléctrica of Sucre has a monopoly of the light and power supply of that city.

Hydro-electric power is probably used to a considerable extent in the tin and copper mines of Bolivia.

The principal mining companies are:

Aramayo Francke Mines, Ltd.—An English concern capitalized at £600,000.

Corocoro, United Copper Mines, Ltd.—A French concern; capital, 40,000,000 francs.

Porco Tin Mines, Ltd.—An English company; capital £140,000. This company is said to own valuable water rights.

The total receipts of the lines of the Bolivia Railway Co. in 1918 were over \$1,750,000.

The total receipts of the lines of the Electric Light & Power Co., of Cochabamba in 1918 were over 400,000 bolivianos. The running expenses and the reserve fund for upkeep exceeded 350,000 bolivianos. Thus the net profit applicable to the government guarantee on the external loan was a little more than 50,000 bolivianos—slightly more than that obtained in 1917.

The Government of Bolivia is studying the problem of the electrification of the railroads and has declared as public domain the waters of the rivers having sufficient power for that purpose.

During the year 1918 the net receipts of the Cochabamba Electric Light & Power Co. and of their railway lines amounted to 72,348 bolivianos. The capital of the company at present is 2,500,000 bolivianos.

The Arica-La Paz line has been leased by the Antofagasta & Bolivia Railway Co.

In May 1919 an automobile service line was put in operation between the cities of Sucre and Cochabamba, and also between Sucre and Potosí.

RIVER TRANSPORTATION.

In the matter of river transportation Bolivia is bountifully gifted; there are 12,000 miles of navigable rivers which have steamship service into the Río Paraguay for outlet via Asunción.

Rosario and Buenos Aires; and into the Rio Madeira and via the Amazon to Pará. Following are some of the principal river routes, showing their mileage for steamboat traffic:

Affluents of the River Paraguay system—

Rio Paraguay, from Lake Uberaba to Rio Paraná	1,116 miles.
Rio Pilcomayo, from Villa Montes to Rio Paraguay	992 "
Rio Bermejo, from Southern Bolivia, across the Northern Argentine to Puerto Bermejo	600 "

Confluents of Madeira-Amazon system—

Rio Madre de Dios, from Inambari to Rio Beni	774 miles.
Rio Beni, from Rio Magnilla to Villa Bella	992 "
Rio Mamore, from Chimore to Guayramerin	806 "
Rio Itenez, from Puento Montes to Rio Mamore	1,054 "
Rio Itanama, from San Pablo to Rio Itenez	620 "
Rio Sara, from La Estrella to Rio Mamore	558 "
Rio Orton, from Tehumann to Rio Beni	496 "

The Desaguadero (outflow) from Lake Titicaca into Poopo Lake is navigable at all times for boats of 500 tons.

The Rio Mamore is the most frequented route. Its course permits the direct transport of merchandise and travellers to and from Santa Cruz, an important centre of overland trade. From Cochabamba, the second city in the Republic cross-country despatch is made via the Rios Chapare, Chimore and Isidore by rafts manned by Yuracare Indians, until their confluence with the Mamore, whence from Trinidad both freight and passengers go by heavy draft boats.

Engineers say that a short canal could be built, in the section of Bolivia which forms the backbone or water shed between the rivers that flow northward to the Amazon system and those flowing southward toward the Plata (Itenez and Paraguay branches), uniting the three greatest water-courses of the

An organization of Italian, Belgian, and Argentinian capital has been formed in the Bolivian town of Nazareno situated on the slope of the Tupiza Valley 60 kilometers from La Quiaca for the construction of a navigable and irrigating canal connecting Nazareno and Salta, Argentina. The canal will follow the Pilcomayo and Bermeja Rivers and will cost several millions of dollars owing to the sinuous character of the route it must traverse. Nazareno is located in one of the wealthiest agricultural and mining sections of the Republic. Three large companies are exploiting the lead mines of the vicinity.

world.

FOREIGN TRADE.

The exact figures of the foreign commerce are impossible to obtain, except in bulk, because Bolivia has no ports, and its exports and imports have necessarily to go through Argentina, Brazil, Perú, Paraguay, or Chile. Therefore, a certain amount of Bolivian products reach their destinations labelled as Chilena, Brazilian, Argentinian, etc., and, in the same way, many articles

destined for Bolivia, but introduced by any of the countries surrounding her, are listed in the country of their origin, as intended for the country through which they pass.

The foreign trade in ten years, in American dollars:

Year	Imports	Exports	Total
1908	15,915,064	19,080,991	34,996,055
1909	14,405,407	24,868,142	39,273,549
1910	19,022,934	29,492,637	48,525,571
1911	22,764,849	32,226,156	54,991,005
1912	19,308,506	35,147,964	54,456,470
1913	21,357,505	36,551,390	57,908,895
1914	15,506,876	25,662,447	41,169,323
1915	8,804,081	37,132,037	45,936,118
1916	12,128,303	39,579,072	51,707,375
1917	13,057,241	61,535,781	74,593,022

President Gutiérrez, in his message read to Congress on August 6, 1919, stated that the exports of Bolivia in 1918 amounted to 182,500,00 bolivianos (\$71,175,000) and the imports to 84,000,000 bolivianos (\$18,260,000)—a total of 216,500,000 bolivianos (\$84,435,000). Compared with the year 1917 these figures show an increase in exports of 24,751,946 bolivianos (\$9,653,259) and in imports of 519,169 bolivianos (\$202,476) or a total increase of 25,271,115 bolivianos (\$9,855,735).

Bolivia imports from the United States during the year 1918 were as follows:

Agricultural implements, \$26,577.
 Blacking, shoe paste, etc., \$2,894; Brass, manufactures of, \$8,579; Breadstuffs, \$84,279; Bronze, manufactures of, \$245; Brooms, brushes, buttons and candles, \$11,925.
 Cars, automobiles and other vehicles, \$163,624; Cement, hydraulic, \$7,388; Chemicals, drugs, dyes and medicines, \$74,371; Clocks and parts of, \$570; Coal and coke, \$107; Confectionery, 2,203; Copper, \$4,397; Cork, manufactures of, \$363; Cotton, manufactures of, \$746,370.
 Earthen, stone, and chinaware, \$4,306; Electrical machinery, appliances, etc., \$29,522; Explosives, \$295,047; Fibers, vegetable, manufactures of, \$12,644; Fish, \$76,060; Fruits and nuts, \$7,317; Furniture of metal, \$2,974.
 Glass and glassware, \$43,775; Grease, lubricating, \$1,560.
 India rubber, manufactures of, \$57,429; Iron and steel, \$1,051,070.
 Lamps, except electric, \$2,389; Lead, manufactures of, 4,022; Leather, \$224,207.
 Musical instruments, \$10,666.
 Naval stores, \$8,903.
 Oilcloth and linoleum, \$7,419; Oils, \$151,227.
 Paper, \$82,589; Paraffin, etc., \$87,179; Pencils and pencil leads, \$6,423; Perfumeries, cosmetics, etc., \$6,236; Phonographs, graphophones, etc., and records for same, \$12,991.
 Seeds, \$646; Shoe findings, \$3,454; Silk, manufactures of, \$5,530; Soap, \$10,165; Spices, \$16,844; Surgical appliances, \$3,590.
 Type, \$531.
 Vegetables, \$2,131.
 Wood, \$50,701; Wool, manufactures of, \$68,139.
 All other articles, \$50,549.

The exports direct from Bolivia to the United States in 1918 were:

Copper, unrefined black, \$37,050.
 Furs, manufactures of, \$140.

Tungsten-bearing ore, tons, \$82,542.

All other articles, \$3,185.

This list, however, does not give the total of the Bolivian goods imported in the United States, because a large portion comes through Chilean or Brazilian channels.

FOREIGN TRADE.

The total Bolivian exports in 1918 were:

Rubber	Bs. 11,038,042
Copper	7,746,343
Lead	1,803,040
Tin	129,611,139
Bismuth	4,431,179
Tungsten	10,591,429
Antimony	4,155,322
Other articles	13,236,356
Total	Bs. 182,612,850

The Bolivian exports to the United States, from 1913 to 1918, are given as follows in Bolivian official figures:

Year	Tin	Tungsten	Antimony	Copper	Rubber	Hides	Wool
1913					539,520	1,252	
1914	23,691			1,164,362	779,253	14,909	
1915	1,355,256	823,488	1,119,561	9,173,005	9,862,232	194,621	44,504
1916	3,461,243	3,920,623	2,424,040	3,875,849	12,101,781	225,235	80,772
1917	26,751,783	6,392,926	1,798,591	1,711,923	12,952,495	325,128	135,737
1918	46,381,587	7,983,355	382,450	7,274,405	9,312,141	148,574	826,785
Total commerce between Bolivia and the United States:							
					1913	Bs. 4,603,578	
					1918	87,303,000	

Increase in five years Bs. 82,699,422
Proportion of increase—20 to 1.

(The above are also official Bolivian figures, which differ from the figures found in American statistics, for the reason explained before.)

The value of imports from Germany into Bolivia more than doubled during the four-year period immediately preceding the war, while those from Great Britain and the United States decreased for the same period. In 1910, the first year of the period, imports from Great Britain amounted to nearly twice those from Germany, but in 1913 the situation was reversed, and imports from Germany amounted to nearly twice those from Great Britain.

In 1913 Germany held first place among the nations from which Bolivia imported textiles, manufactured iron and steel, mining machinery, electrical apparatus, explosives, and railway equipment. Great Britain supplied a large quantity of candles, textiles, and machinery of various kinds. Wheat was the largest single commodity imported from the United States and the second largest from Chile. Coal was the leading import from Chile. Half the imports from Peru consisted of one item, sugar.

Bolivia is one of the countries that have not replenished the large stocks of paint carried before the war. The combined paint imports of Bolivia in 1916 and 1917 were 344,359 kilos, valued at 238,944 bolivianos, or about 100,000 kilos less in quantity and 90,000 bolivianos less in value than the imports of

the year 1913. The imports of paint from Germany alone in 1913 were more in value than the total paint imports of any succeeding year.

However, Bolivia's imports from the United States have greatly increased since the war years, their total value having risen from 16,110 bolivianos in 1913 to 30,515 bolivianos in 1916 and to 68,755 bolivianos in 1917. The United States now holds the leading position in this paint trade, supplying a somewhat better grade of paint than that furnished by Great Britain, which holds second place. The principal proportion of the paint imported into Bolivia is in the form of paste and powder. Recent investigations indicate that Bolivian markets are well worth attention, particularly since the growth of its export trade has greatly increased the purchasing power of the country.

Imports of all kinds of colors, dyes, paints, etc., into Bolivia, in 1916 amounted to 134,939 kilos, worth 87,350 bolivianos. In 1917, the quantity imported was 209,420 kilos, valued at 151,350 bolivianos.

CUSTOM REGULATIONS.

The following information about requirements in consular invoices and other documents will be of use to American exporters doing business with Bolivia:

Shipments to Bolivia may be made in transit via Chile, Perú, Brazil, and Argentina. No through bills of lading are issued. Shipments via Mollendo, Perú, require six copies of consular invoices. Five are required for shipments via Antofagasta and Arica, Chile; Para and Manaos, via Amazonas; Brazil, and also via Cornuba and Puerto Suarez, by the Paraguay and Plate Rivers and Buenos Aires, Argentina. Consular invoices must be written in Spanish, and must be forwarded together with the bills of lading, commercial invoices, and other documents to prove the actual value of the merchandise. Only one copy of the consular invoice is returned to the shipper. The consular invoices must contain the name of the consignee at the place of transshipment, the name of the consignee in the Bolivian city or town of destination, and the net and gross weight in kilos. If there is no custom house at the place to which goods are consigned, the custom house of destination also must be specified in the consular invoice.

The Bolivian custom houses are located at La Paz, Oruro, Villazon, Puerto Suarez, Uyuni, Yacuibá, Villa Bella, Cobiya, Manoa, and Guajara Merim. For fire arms, ammunition, etc., a permit must be obtained from the Bolivian government.

The agency of Corocoro has been raised to the class of a national customhouse, to function independently of the northern customhouse. The new office is authorized to import merchandise for the city of Corocoro and other cities of the Province of Pacajes, and to export minerals, such as copper, from that Province.

All packages must have marks, numbers, and net and gross

weights, and they also must be distinctly marked "En tránsito para Bolivia" (in transit to Bolivia).

Consular fees are \$1.20 for shipments less than \$80 (American money) in value; 2 per cent. for those of \$80 or more in value, and \$1 for extra copies. The amount of consular fees must be stated in a special column in the consular invoice. A statement must be put at the bottom of the consular invoice declaring that the amounts as therein contained are correct. Consular invoice blanks must be purchased at Consulate at 20 cents per sheet.

The meter and the kilo are the standards used in the custom offices, and all invoices and shipping documents should have the weights and measures stated in metric units to avoid troublesome delays and difficulties. Textiles imported by the meter are usually sold by the vara, which ranges from 32 to 32.9 inches. The old Spanish units, which vary greatly, are in general use outside of Government and railway circles.

A recent executive order frees from license the importation of sugar for ordinary use when made through the customhouses of Villa Bella, Cuayaramerin, Cobeja, and Albuna, provided the importation is made in accordance with the customs, rules and regulation now in force.

According to a law of March 6, 1919, concerning the importation of fuel, imports of coal, crude petroleum, wood, coke, anthracite coal, and similar products are exempted from storage charges when they are forwarded within two days and not returned to Government warehouses.

The consulates of Bolivia in the United States are located at Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Kansas City, Mo.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Norfolk, Va.; Philadelphia, Pa.; San Diego, and San Francisco, Cal.; Seattle, Wash.

TARIFF.

The Bolivian tariff taxes imports on the basis of value of goods imported. The valuation is determined by official figures expressed in Bolivian money. Since the exchange rates vary, it is useless to give the official valuations. The valuation at the present time is far below the actual prices in American markets.

Beading, glass, gold or silver, colored, 30%.	duty; corset steels, covered or not, 25%.
Fans, 35%.	Leather stirrups, 40%.
Hooks, 25%.	Chicory, 25%.
Passementerie work, silk, 35%; ordinary metal or silver, gilded or plated, 25%; all others, 30%.	Ornaments for millinery, furniture or buildings and other purposes, 30%; paper ornaments, 25%.
Glove stretchers, 30%.	Leather straps, 25%.
Can openers, 25%.	Bran, free of duty.
Button hooks, 25%.	Wash stands, 25%.
Brushes, 30%.	Turpentine, 10%.
Oils, mineral, vegetable and animal, except perfumed, 30%.	Electric posts, 25%.
Olive oil, 25%.	Toilet water, 30%.
Oil cans for machines, 25%.	Needles, sewing, 30%; for sewing machines, 10%; compass needles, 25%.
Steel bars and plates, free of	

- Eyelets, 30%.
 Insulators, telegraph and telephone, free of duty; for pianos, 25%.
 Ground pepper, 25%.
 Furniture sets and bridal supplies, 40%.
 Wires, covered or not, 25%; barbed and for electrical transmission, free of duty.
 Brims for hats, of fabric or cardboard, 35%.
 Albums, 30%.
 Oil bottles, 30%.
 Sugar, rock candy, 25%; refined, specific duty, 6.50 bolivianos per 100 kilos; raw sugar and molasses, specific duty per 100 kilos, 17.40 bolivianos.
 Pins, 25%.
 Carpets and rugs, 30%.
 Almanacs, 30%.
 Lace caps, 35%.
 Almonds, with or without shell, 25%.
 Starch, 25%.
 Motors, iron or steel, or galvanized, bronze or copper, 25%.
 Pillows and cushions, 35%.
 Gilded bolsters, free of duty.
 Hemp and bird seed, 25%.
 Tar, 30%.
 Dials, 15%.
 Portable stoves with or without pieces of metal, porcelain or wood, 40%; same of nickel, bronze or copper or nickel plated, 25%.
 Anchors, iron and steel, free of duty.
 Paintings, 30%.
 Napkin rings, 30%.
 Accessories for umbrellas, bronze or plated, 25%.
 Live stock, free of duty.
 Anise, 25%.
 Eye-glasses, spy-glasses, opera glasses and all other kinds, 25%.
 Fish-hooks, free of duty.
 Dampers, 25%.
 Apparatus of all kinds, free of duty; for electrical illuminations and telegraph and telephone, 10%.
 Ploughs, free of duty.
 Instruments, musical, 30%.
 Aerometers, 30%.
 Moulding sand, 30%.
 Jewelry, gold or plated, 10%; false jewelry, 25%.
 Parts for carts, 35%; for coaches, 40%.
 Rice, in grain, 10%; ground, 25%.
 Articles not designated in this tariff, as follows: of steel, wire, iron or steel tinued; of wire, bronze and copper, aluminum, colored and liquidified; iron plates, iron crosses and chains, free of duty; of iron in all other forms; brass, silver, lead or zinc, 25%; of alabaster, tortoise-shell, pasteboard and celluloid; articles of India-rubber, tin-plate, stone, ivory, marble, pearl and paper, 30%; of gold, 10%.
 Supports, 30%.
 Surcingle, 40%.
 Coffins, 40%.
 Automobiles, all sorts of vehicles, 35%.
 Filberts, 25%.
 Reindeer horns, 30%.
 Vetches, 25%.
 Oats, in grain, 10%; cut, 5%.
 Advertising matter, catalogues, 10%.
 Picks, free of duty.
 Trays or baskets, 30%.
 Saffron, 30%.
 Quick silver, free of duty.
 Sugar bowls, 30%.
 Chip axes, free of duty.
 Sulphur, 30%.
 Bibs, 40%.
 Fish, dried or smoked, 30%.
 Night and sickman vases, 30%.
 Hides and skins, 30%.
 Architectural designs, free of duty.
 Martin-gales, leather, cotton, wool, or mane, 40%.
 Scales, 25%.
 Buckets of tin plate, painted, 40%; all others, 30%.
 Refractory bricks, 10% all others, 30%.
 Benches, carpenter, free of duty.
 Bandages or belts of cotton, linen or jute, of wool with or without mixture of cotton; adominals, elastic or not, of cotton, linen or wool, 30%; all other kinds of bandages, 35%.
 Banners, 35%.
 Small bands of paper, cotton or silk, for candles and foods, 40%.
 Bath tubs and showers, 25%.
 Gunsticks, 25%.
 Games and toys, 30%.
 Whale-bones, rough, 25%; worked or its imitation, lined or not, 30%.
 Varnishes, 30%.
 Augers of iron or steel for agriculture and mining, free.
 Small bars of iron or steel, for agriculture and mining, free.
 Barrels, casks, small barrels of wood, etc., 30%.
 Frames for stretching linens, 30%.
 Canes with guns (only with permission of government), 50%.
 Canes of tortoise-shell or ivory, with handle of gold or silver,

- 40%; all other kinds of canes, 30%.
 Dressing gowns for men, 40%.
 Trunks and chests, 40%.
 Reed prepared for furniture and other uses, 30%.
 Carpenter's braces with or without handles of wood, free.
 Shoe blacking, 30%.
 Books, printed, reviews, pamphlets and periodicals, free; memorandum books, note books, archives, 30%.
 Bicycles, 35%.
 Lavatories, 35%.
 Billiards, 40%.
 Leather pocket-books, 30%.
 Bank notes, certificates, mortgage papers, loose or bound, 40%.
 Screens, 30%.
 Stoppers for syringes of bone, rubber, gutta-percha or metal, 30%.
 Biscuits, 25%.
 Laces, 30%.
 Jackets and all other similar garments for men, 40%. Empty bags for packing of duck, canvass and other materials, 35%; empty bags for carrying metals, 10%.
 Boas of fur to 50 centimeters, of more than 50 centimeters, of feathers up to 50 centimeters, more than 50 centimeters, of silk tulle or mixed with cotton, 40%.
 Bridles, 25%.
 Horns for vessels, cars and wagons, 15%.
 Balls for billiards of ivory and its imitation, 40%.
 Bags for packing, stamped or not, of paper, 30%.
 Marbles, 30%.
 Pumps: wood, for barrels, 30%; of tin plate or brass, of bronze or copper for same, 25%; common pumps for wells, of iron or steel, fire, agriculture and mine, free.
 Pumps for sprinkling plants, 25%.
 Cigar and cigarette holders of wood, with or without glass, parts, or ornamental metal; of meerscham or its imitation, 30%; lamp burners of copper, bronze or nickel, 25%.
 Embroideries of wool, finished or not, on canvass, 30%.
 Wax, animal, mineral or vegetal, and manufactures of, except flowers, 30%.
 Locks, iron, for boxes, trunks, drawers, valises, show-cases, with or without key; 30%; double bronze or copper with or without pieces of another metal, other kinds not specified, 25%.
 Cigar cases, 30%.
 Cement, Portland and similar 15%; glue for cementing, liquid of rock alum, asbestos, 30%.
 Chisels of iron or steel, free.
 Moving pictures and accessories 30%.
 Ribbons, of cotton, 30%.
 Ribbons, silk, with rubber, 25%.
 Belts, 40%.
 Ribbons, silk, with or without metal, 35%.
 Prunes, preserved, 25%.
 Dates, preserved, 25%.
 Cloves, 25%.
 Nails, 25%.
 Copper and bronze plates or sheets; 25%.
 Portable kitchens; 25%.
 Cocoa, 25%.
 Cocoanuts, 25%.
 Cochineal, 25%.
 Cocktail shakers, 30%.
 Fire crackers, 30%.
 Glue for clarifying wines, and other purposes, 15%.
 Mattresses, 35%.
 Harness collars, 25%.
 Dog collars, 25%.
 Bead strings, 25%.
 Gum seed, 25%.
 Non-specified wearing apparel, 40%.
 Compasses for industrial purposes, free.
 Preserved food, except sardines, 25%.
 Metal cups, 25%.
 Coral, 30%.
 Neckties, 40%.
 Coal pits, portable, of copper or bronze for stoves, same of iron or steel, galvanized or not or painted, 25%.
 Teasels of all sizes for frizzling, free.
 Tortoise-shell plates, unfinished or its imitation, 30%.
 Meats, salted, cow, pork or veal, 25%; freshly preserved, free.
 Saddle paddings of cloth or cashmere, without golden stripes, of skins, elaborate or not; 40%.
 Tents of cloth and other kinds of material, tarred or not; 35%.
 Desk sets; 30%.
 Carts, free.
 Wheelbarrows, free.
 Chin-straps, for helmets, 25%; of brass, gold, metal or silver plated, 25%.
 Railroad cars, free.
 Charts and geographical and typographical plans, free.
 Cardboard, 30%.
 Cartridge boxes of skin and tin, 30%.
 Cartridges, 25%.
 Houses of iron or wood, 30%.

Bells, 30%.	Whips, 30%.
Cocoa-shells, 30%.	Chimneys and stoves, 25%.
Chestnuts with or without shells, 30%.	Thumb-tacks, 25%.
Beds and cradles, 35%.	Chocolate, in powder or cakes, 25%.
Caviar or fish eggs, 25%.	Potatoe flour, 25%.
Kettles or two-piece cast iron pots for boiling glue, galvanized or tin plated or not, free.	Demijohns, 30%.
Barley, with shell, toasted or sprouted, peeled, 25%.	Thimbles, bone, iron, steel, brass or white metal, free; ivory, tortoise-shell, pearl, imitations, plated metal, 25%.
Hung beef, 25%.	Squares for artisans, free.
Onions, 25%.	Snuffers, 25%.
Strainers, 25%.	Screw-drivers, free.
Venetian shades, 30%; of Chinese mats, of silk, 35%; Reed, 15%.	Glass-cutters, free.
Cupels, 10%.	Designs and patterns for wood working, embroidering or dress making, 30%.
Snappers, 25%.	Artificial teeth, 30%.
Clippers, 25%.	Military shoulder knots, 35%.
Cork plates or in any other form, 30%; stoppers, free.	Syringe fountains, 30%.
Cornices, of wood or metal, 30%.	Candles, 25%.
Wreaths of all kinds, 30%.	Railroad ties, free.
Corset covers, valued same as corsets, with a rebate of 50%, 40%.	Statues, 30%.
Straps of leather, 40%.	Axles, 30%.
Corsets, 40%.	Shoe elastic cloth, 30%.
Pencil sharpeners, 25%.	Boats, free.
Paper cutters, 30%.	Punches, brass, free.
Pen-knives, 25%.	Machinery, packings, free.
Barks, for dyeing or tanning, free.	Skirts, 40%.
Ladles for sugar mills, free.	Laces, 30%.
Curtains, 30%; of silk or velvet, wool, figured or with borders, 40%.	Pleated cloth, cotton and silk, 30%; pure silk, 35%.
Ladies work boxes of all kinds, 30%.	Linoleum and rubber cloth, 30%.
Bristle, unmanufactured, vegetal, woven for lining of furniture and other uses, 30%.	Pickles, 25%.
Crucibles, free.	Veneers, 30%.
Stamps, 30%.	Hand vices, free.
Crosses, 25%.	Brooms, 30%.
Hand-painted pictures, 30%.	Whisk brooms, 30%.
Rennet, 30%.	Shot-guns (imported only with permission of government), 50 per cent.
Silver-ware of any material except ivory, 25%; with ivory handle, 30%.	Chisels, free.
Knives, for industrial purposes, free; for any other purposes, 25%.	Cuspidors, 25%.
Ladle for sugar mills, free.	Watch and clock faces, 25%.
Collars and cuffs, paper and celluloid, 30%; cotton, linen and silk for men and women, 40%.	Stumps, 30%.
Drop counters, 30%.	Enamel, 25%.
Weaver's glasses, 30%.	Emery, 30%.
Strings for musical instruments, 30%.	Swords, 25%.
Hides and skins, 30%.	Mirrors, 30%.
Cradles and baby carriages, 35%.	Hand spikes, free.
Vests, 40%.	Spurs, 25%.
Shawls, cotton or wool, 40%.	Sponges, 30%.
Buckles, glass or brass, 25%.	Lithographic prints and engravings, 30%.
Sweaters, 40%.	Stands, 25%.
Water-proof jackets, 40%.	Shoemakers pegs, 25%.
Children's overcoats, 40%.	Stearine, raw, 15%.
Galloon, copper or silver, 35%.	Window shade cloth, 30%.
Check forms, 30%.	Fire extinguishers, free.
	Stoles, church, 40%.
	Tow for furniture making, 30%.
	Oakum, free.
	Stirrups, iron, steel, bronze or copper or any other plain metal, uncovered, 25%; wood, 30%; leather or velvet cover, 35%.
	Cases for scissors and other instruments, of all kinds, 30%.
	Labels, 30%.

- Squeezers for extracting juice of meat and fruits; 25%; wringers for clothes, with cylinders of any kind of material, free.
 Extract of meat, 25%; logwood, 40%; malt, 30%.
 Lighthouse lanterns, 30%.
 Lamp globes, hooks, and other parts for gas or electric lights, 10%; other kinds of lamps, 30%.
 Door mats, 30%.
 Bags, free.
 Vermicelli, 25%.
 Felt, 30%.
 Rope yarn, 30%.
 Fillet, 25%.
 Filters, 30%.
 Hoops, free.
 Flower-pots, 30%.
 Flowers and artificial plants, 30%.
 Foils, 30%.
 Foot warmers, 35%.
 Phonographs, 30%.
 Paring chisels, free.
 Match boxes, are valued the same as cigar-cases in their respective class.
 Matches, 30%.
 Photographs, 30%.
 Portable forges, free.
 Dress-coats, 40%.
 Small flasks, 30%.
 Blankets, 30%.
 French beans, 25%.
 Fruits, fresh, free; dry, non-specified, 25%.
 Fruit baskets, valued as sugar-bowls in its respective class.
 Bellows, free.
 Sheaths, 40%.
 Saddles, 30%.
 Chick-peas, 25%.
 Jack-planes, 30%.
 Gelatine, 25%.
 Cotton fabrics, linen, wool, hemp or flax, jute, 30%; silk fabrics, or mixed with silk, 35%.
 Artificial silk is considered as natural animal silk.
 Geographical and astronomical globes, free.
 Glucose, 30%.
 Military neck pieces, silver-plated or gilt, 25%.
 Rubber, raw or manufactured, 30%.
 Caps, 40%.
 Joiner's gauges, free.
 Greases, 30%.
 Scythes, free.
 Guano, free.
 Gloves, cotton, linen, wool, boxing, fencing, bristle, flax or jute, 30%; silk, mixed or kid, suede or leather, 35%.
 Lamp shades, 30%.
 Muffs, 40%.
 Traveling coats, 40%.
 Silk lining for hats or caps, 40%.
 Leather military stripes, 25%.
 Mine fuses, free.
 Guttapercha, raw or in plates, 30%.
 Hatchets, free.
 Hammocks, 30%.
 Flour, 10%.
 Buckles, 25%.
 Ice-cream freezers, 25%.
 Horseshoes, 25%.
 Tools, non-specified, free.
 Figs, 25%.
 Cotton or wool waste, 30%.
 Thread, cotton, wool, with or without silk, for sewing, embroidery or darning, 10%, linen, flax or jute, for packing purposes, 30%.
 Tin-plates, 15%.
 Saw blades, free.
 Material for manufacture of artificial flowers, 30%.
 Mushrooms, free.
 Shoe lasts, free.
 Hatter's shapers, free.
 Assaying furnaces, free.
 Garden threshers, free.
 Hair-pins, 25%.
 Eggs, free.
 Loadstones, free.
 Printing equipment, free.
 Soaps, 30%.
 Soap containers, 30%.
 Ham, 25%.
 Headstalls of halter, 40%.
 Syrups, 25%.
 Fishing tackles, 30%.
 Jars, 30%.
 Bird cages, 30%.
 Syringes, 30%; for hypodermic injections, free.
 Juices, 25%.
 Toys, 30%.
 Lacquer, 30%.
 Sealing wax, 30%.
 Lamps, 30%.
 Small hand lamps for mines, free.
 Lamps of iron or steel, with or without handle, for agriculture, free.
 Wool, free.
 Oysters, shrimps and lobsters, 25%.
 Penholders, brass, nickel plated, 25%; gold or silver, 10%; pearl, ivory, engraved, wood or metal composition, 30%; metal, 30%; for slates, with or without wood, free.
 Wash stands, iron, 25%.
 Ribbon bows, silk, 40%.
 Milk, powdered, sterilized or condensed, 35%.
 Lye, common, 30%.
 Vegetables, fresh, dried or preserved, 25%.
 Tongue, dried or in brine, 25%.
 Lentils, 25%.
 Letter stencils and stamps, 30%.

Frock coats, 40%.	Embroidery with gold or silver silk twist, hemp, gold or silver thread for spangles, etc., 25%.
Wine jars, 35%.	Brushes with handles of ivory for barbers, with handles of bone, ordinary metal, or wood, 30%; brushes of other kinds for artisans, free.
Garters, 40%.	Burnishers of iron or agate, free.
Sand paper, 30%.	Brushes for horses, free.
Filex, for artisans, 30%.	Burlins, free.
Ear picks, 30%.	Statues and busts of wood, marble, stone, metal or paste, with or without pedestal, 30%.
Pen wipers of all kinds, 30%.	Painter's easel, 25%.
Chinaware, 30%.	Human hair, prepared or not, 30%.
Mirror plates, 30%.	Halters, 40%.
Hops, 10%.	Dowels, free.
Mourning clothes, 40%.	Wire cable, free.
Watch keys, 25%.	Cocoa in powder form or otherwise, 40%.
Faucets or barrel stoppers, 30%.	Sauce-pans, 25%.
Keys for lockers, 30%.	Chains, 25%.
Grass cutters, and other similar instruments, free.	Coffee, in grains or ground, 40%.
Cabinet wood, unmanufactured, 30%.	Coffee pots, of bronze or copper, nickel plated, of white metal, German silver, gilded, 25%; all other, 30%.
Polished wood, 15%.	Boxes, with tools for artisans, free; safes; boxes, wood, cardboard, tin, brass, musical, etc., 30%.
Dyewood, 30%.	Purses, hand baskets and other similar bags made of paste-board or wood, ordinary metal, silver plated or not, gilded or nickel plated; tortoise-shell, ivory or pearl, silver, etc., 40%.
Corn, 30%.	Powder boxes and hat boxes, 35%.
Nipples, 30%.	Small boxes for druggists made of cardboard, wood or tin, 30%.
Aprons, 40%.	Cases, white wood, for packing 30%.
Handles, umbrella, parasol or cane; broom or duster, 30%; handles for tools, free.	Lime, 30%.
Hose, rubber, metal, leather, canvas, 25%; rubber tubes for syringes, 30%.	Hosiery, men's women's or children's 35%.
Peanuts, 25%.	Decalcomania, 30%.
Models for tailors or dressmakers, 30%.	Boilers, free.
Mantles, 30%; same embroidered, eliminating boxes, 35%.	Heaters, 25%.
Horse blankets, 40%.	Shoes (duty is collected on dozen pairs as unit), leather of any kind or cloth, non-specified, 45%; water-proof, with wool outer cover; with attached skates, with fiber or wood soles, 40%.
Lard, 25%.	Shoes having less than fifteen centimeters in length are subject to a rebate of 75% on the regular duties; those having from 15 to 20 centimeters in length are subject to a rebate of 15% on the regular duties.
Ginger, 30%.	Shoe horns, horn, bone, metal, non-specified, 25%; tortoise-shell or imitation, 30%.
Machines, non-specified, with accessories for industries, arts, sciences, with or without pieces, free; for chopping meat, grinding and toasting coffee, making butter, etc., 25%.	Men's or women's drawers, 40%.
Frames, 30%.	Shirts of all kinds for men, women and children, 40%.
Ivory, natural or imitation, 30%.	Underwear, 40%.
Lamp shades, 30%.	
Marble, blocks, 30%.	
Hammers, free.	
Putty, 30%.	
Mallets, iron or steel, free.	
Wicks for lamps, 30%; greased for gas fixtures, sulphured for disinfecting containers of wine and liquor, free.	
Measures, 15%.	
Liquid measures, 25%.	
Pottage, non-specified, 25%.	
Metal, yellow, white or nickel, 25%.	
Honey, of bees, sugar cane or palm, 25%.	
Models for embroidery and for drawing, free.	
Patterns, 30%.	
Bottles, 30%.	
Buttons, 30%.	
Buttons for electric bells, 30%.	
Muzzles and filets of iron or other ordinary metal, for horses, 25%.	
Trusses, 30%.	

- Bells, 25%.
 Tubes or pipes, of iron or steel, of lead or composition for aqueducts; of iron, bronze or copper for boilers, 15%; of iron for chimneys and other uses, for bedsteads, 25%, of clay, for water-works, 30%.
 Baskets, 30%.
 Candlesticks, 25%.
 Hemp or jute, raw, 30%.
 Cloth capes for men, 40%.
 Metal stoppers for bottles, free.
 Rifles (only with permission of the Supreme Government), 50%.
 Caramel, liquid or paste, 30%.
 Charcoal, pit coal and coke, free.
 Crayon for drawing, black, 30%.
 Frames, 30%.
 Jackets or waists, 40%.
 Parquet flooring, 30%.
 Mustard in powder form, 25%.
 Motors for machines, free.
 Springs for clocks or watches, 25%.
 Gun shot, 25%.
 Dolls, 35%.
 Moss, 30%.
 Music sheets, 30%.
 Razors, 25%; in boxes with accessories, 35%.
 Levers, for artisans, free.
 Nuts, 25%.
 Nuts, 25%.
 Perfumes, 40%.
 Leather bottles and leather boots, 30%.
 Artificial eyes, 30%.
 Archil in liquid, paste or powder form, 30%.
 Ecclesiastical trimmings, 40%.
 Gold for dentists, 10%.
 Wicks, 30%.
 Straw, 30%.
 Wood palettes, 30%.
 Salad mixers, 25%.
 Trousers, 40%.
 Chandellers, 30%.
 Lamp shades, paper, cotton or porcelain, 30%; silk, 35%.
 Diapers, 40%.
 Towels, 30%.
 Handkerchiefs, 30%.
 Paper, 30% in strips for telegrams and newspapers, free.
 Paraffin, 15%.
 Umbrellas, 35%.
 Passementeries, 30%; of silk, with mixture of other inferior material, 35%; of ordinary metal, gilded or nickel-plated, lined with any material not of silk, 25%.
 Raisins, 25%.
 Pastes of beans, rice, etc., 25%.
 Hay, free.
 Skates, 30%.
 Combs, 30%.
 Side combs, including back combs, 30%.
 Hair, 30%.
 Seeds, of cotton or palm, free.
 Racks, 30%.
 Parchment, 40%.
 Pearls, 10%; of glass or composition, 30%.
 Pessaries of rubber with or without metal, 30%.
 Weights, scale, 25%.
 Fish, dry, smoked or in brine, 25%.
 Stems, 30%.
 Nipple shields, 30%.
 Pick-axes, free.
 Stones, fine, for grinding knives, or sharpening tools, free; pumice stone, 15%; fire-stone, 30%.
 Pepper, 25%.
 Pinchers, 30%.
 Pipes, for smoking, 30%.
 Paper weights, 25%.
 Pistols (only with permission of Supreme Government), 50%.
 Revolver cases, 35%.
 Slates, free.
 Plants and seeds, free.
 Soles for shoes, 30%.
 Silver bars, free.
 Lead in sheets or bars, 25%.
 Feather dusters, 30%.
 Leggings, 40%.
 Powder, for mines and dynamite, free; for hunting, in barrels, 30%.
 Powder, for killing insects, or clarifying wines or liquors, for coloring liquors, for cleaning metal objects, 30%; face powder, in boxes, packages or cans, with or without puffs, 40%.
 Bottle cases, 40%.
 Money cases, 30%.
 Press, of iron or steel, to press cloths, or for domestic use, 25%; for typographs, or agricultural use, of iron, wood, or steel, free.
 Wringers, free.
 Doors and windows, 50%.
 Polishes of iron or steel, of wood or bone, free.
 Punchers, free.
 Daggers, 50%.
 Cheese, 25%.
 Racquets, 30%.
 Scrapers of iron or steel, free; scrapers for desk, with handle of wood or composition, 30%.
 Scrapers for cleaning planks of ships, free.
 Spokes, 15%.
 Fishing lines, 30%.
 Pocket-books, 35%.
 Sprinklers, 30%.
 Rulers, 30%.
 Plough-shares, free.
 Screens for balconies, windows, or gardens, painted or not, 40%.
 Oars, 15%.
 Springs for furniture, 25%.
 Reins, 40%.

Wheels, 25%.	Pocket knives with one or two blades, 25%.
Rollers, 30%.	Glass cutters of iron with steel blades, free.
Rosaries, 30%.	Small chains for bridles, 25%.
Wheels for carriages, of wood, 15%; of iron or steel, free.	Cones or bags of paper for candy, 30%.
Sheets, embroidered or not, 40%.	Spoons, 25%.
brodered or not, 40%.	Petticoats, 40%.
Hollow punches, free.	Spatulas of iron or steel, 30%.
Wrenches, free.	Tin bars or plates, 25%.
Tapioca, 25%.	Plush for all purposes, 25%.
Salt, 25%.	Photographs, 30%.
Sausages, 25%.	Crackers or biscuits, without sweets or juice, 25%.
Saltpetre, free.	Padlocks, 25%.
Life belts, 35%.	Cinnamon, 25%.
Sanders, 30%.	Wood ashes, 30%.
Slood crystalized for sugar, 30%.	Paper cutters, 30%.
Leech, free.	Dried shrimps, 25%.
Sardines, 25%.	Ordinary bottles for liquors, free.
Tallow, 30%.	Mustache holders, 40%.
Grits, 25%.	Powder puffs, 30%.
Saws, free.	Neck-pieces for women, 40%.
Siphons, 30%.	Polishing powder, 30%.
Saddles, 40%.	Truffles, 25%.
Arm shields, 30%.	Leather cases, 40%.
Quilts, 30%; silk, 40%.	Vanilla, 30%.
Corset covers, 40%.	Valves for machines, free.
Oil cloths, 40%.	Rods of wood, free.
Envelopes, 30%.	or umbrellas, 25%.
Overcoats, 40%.	Vaseline, 30%.
Solder, free.	Candles, 30%.
Hats and caps for men, women and children, 40%.	Tricycles, 35%.
Surgical bougies, 15%.	Poison for rats, 30%.
Soldering pipes, free.	Dresses for women and children, 40%.
Suspensories, 30%.	Glass, 30%.
Tobacco, in leaves or picked, 3.00 Bolivianos; for chewing, 3.50 Bolivianos per kilo.	Vinegar, 25%; in glass cases, 3.00 Bolivianos per dozen bottles.
Pop-guns, 30%.	Eye-shades, 40%.
Talcum powder, 30%.	Anvils, free.
Cocers, 30%.	Jute, 30%.
Cards, 30%.	Zinc, bars, or ingots, free; sheets or blocks, 25%.
Tea, of all kinds, except medical, 50 Bolivianos per kilo.	Rhus for dyeing, 30%.
Cloths, metallic, of wire or iron, painted or not or galvanized, 25%.	Rings; key, curtain, padlock, bridles, etc., 25%.
Telephones, 10%.	Wagon harnesses, 35%.
Nut crackers, free.	Fasteners, 10%.
Forks, 25%.	Razor straps, 30%.
Thermometers, medical, free; all others, 25%.	Bronze goods, non-specified, 25%.
Screw-plates for artisans, free.	Bottles, iron or traveling, and earthenware bottles, 30%.
Tea-pots, 25%.	Clothes brushes, 30%.
Scissors for nails and lamps, 25%; for moulding, sewing, for barbers and tailors, free.	Wax, 30%.
Ink, printing, lithographic, and typewriter, free; in all colors for writing or dyeing, 30%.	Shoemakers' wax, 30%.
Inkwells, 30%.	Cigarettes, 3.50 Bolivianos per kilo, legal weight.
Type, free.	Cigars, 5.00 Bolivianos per kilo, gross weight.
Cork-screws, 25%.	Tollies, porcelain, 25%.
Drawers for furniture, 30%.	Clothing, cut but not finished, 50%.
Fat, 25%.	Sewing boxes, 30%.
Screws of iron and steel, nickel plated or plated, of bronze or brass, 25%.	Horse hair, 30%.
Traps, 25%.	Glassware, nonspecified, 30%.
Turpentine, 30%.	Wimbles, iron, free.
Wheat, free.	

Bearings, iron, steel, bronze, or copper, 25%.	Electric batteries, 10%.
Sperm, whale, 30%.	Wash-stands, 25%.
Pictures and prints, on paper or cloth, 30%.	Pistachio nuts, 25%.
Poker chips, 40%.	Flat irons, free.
Iron, raw, pig, plate, non-specified shapes; boiler grates; sugar furnaces, tanks, weighing over 46 kilos for mining purposes; rails, and parts of machinery, free.	Graphite, polishing, 25%.
Iron manufactures, not otherwise specified, 25%.	Feathers, 30%.
Iron shoe-tips, free.	Pens, writing, 30%.
Covers, for pianos and furniture, hats, etc., 40%; straw, for bottles, 30%.	Multigraphs, 30%.
Soda-water containers, 25%.	Atomizers, 30%.
Gasoline, 25%.	Plow blades, free.
Siftings, 25%.	Bronze, bronze paint or powder, 25%.
Instruments, scientific, not otherwise specified, free; musical, and parts, including pianos, organs, etc., 30%.	Cane tips: metal, 25%; horn or bone, 30%.
Yeast, 30%.	Rifles, 50%, imported only with Government permit.
Awls, free.	Blood, crystallized, for sugar refining, 30%.
Tooth-picks, 30%.	Parson cloaks, 40%; vegetable ivory, 30%.
Monkey wrenches, free.	Drills, hand or mechanical, free.
Table cloths and napkins: paper, 30%; cloth, 40%.	Knit goods, non-specified, 40%.
Butter, 25%.	Pincers, free.
Masks, 50%.	Hair curlers, 25%.
Pocket lighters, 25%.	Bench vises, free.
Transmission belts, free.	Suits and dresses for children, 40%.
Furniture, 40%.	Tripoli, 10%.
Pastilles, disinfecting, 25%.	Structural iron, 10%.
Shirt fronts, 40%.	Mate, 25%.
	Gypsum, 30%.
	Horse collars, 40%.
	Dog collars, 25%.
	Glass bead necklaces, 25%; amber or imitation, 30%.
	Electrical armatures, free.
	Compasses, magnetic, 25%.

On January 2, 1919, the new taxes on imported liquors were announced. Following is the list, per dozen bottles:

Bitters, 19.20 bolivianos; white wines, 24; liquors, such as cognac, whisky, and gin, 24; sweet wines, 24; beer in ordinary bottles, 3; beer and "chicha" in other containers, 0.40 per liter; mineral waters, 0.05 per kilo; soft drinks, 0.05 per kilo; table wines in ordinary bottles, 9.60 per dozen; in other containers, 0.08 per liter; light sparkling wines in ordinary bottles, 8.40 per dozen; in other flasks, 0.70 per liter; champagnes and other heavy sparkling wines, 24 per dozen; dry wines in ordinary bottles, 10.80 per dozen, and in other containers, 0.90 per liter.

DRUGS.

All drugs are valued at 30% according to valuation fixed by the Bolivian Government.

The exceptions are:

Liquors, alcoholic medicines, in ordinary bottles, up to 75 centilitres, 8.00 bolivianos; alcoholic medicinals, .80 bolivianos.

Wines, medicinal, non-specified, in plain bottles, up to 75 centilitres, 8.00 bolivianos; medicinal, non-specified, in other containers, .60 bolivianos.

Potash, pure or impure; serum, in general, for epidemics, in cases, free.

FINANCE.

The finances of Bolivia are in bad shape. The normal expenditures exceed the revenue, and this situation is growing more acute.

The revenue of Bolivia is mainly derived from custom duties, spirit duties, tin, silver, gold, wolfram, antimony, and other minerals, rubber export, patents, and stamps.

The following table shows the ordinary revenue and expenditure for 7 years:

Year	Revenue	Expenditure
1911	\$6,666,205	\$7,261,130
1912	8,065,840	6,493,680
1913	8,807,545	8,888,920
1914	9,200,000	9,200,000
1915	6,794,320	8,581,575
1916	6,413,800	9,029,335
1918	13,034,750	14,458,100

The fiscal year of 1918 was closed with an excess of taxes over the estimated revenue, amounting to 2,600,000 bolivianos. The import duties on imported alcohols, on tobacco, customs duties, and export duties on elastic rubber, also the income of the railroad lines, left a deficit of approximately 6,500,000 bolivianos, in which sum is included as loss 1,000,000 bolivianos in nickel coin never put in circulation, and the entire sum of 600,000 bolivianos circulated as a fund to pay the debts contracted for the treasury, which that year were entirely nominal. On the other hand, the development of the banking business, and the high price of exported minerals on which corresponding duties were collected, increased the funds in the treasury in these and other items by an approximate sum of 4,000,000 bolivianos, reducing the deficit to the figure given above.

The total import duties during the first six months of 1919 were approximately 10,000,000 bolivianos.

The estimated general balance of the national budget for 1919 shows the receipts at 31,328,767 bolivianos and the expenditures at 38,471,853 bolivianos, leaving a deficit of 7,143,085 bolivianos.

On October 22, 1918, President José Gutiérrez Guerra convened the National Congress in extra session to consider, among other things, the budget, municipal licenses, accidents to workmen, additional credits, the moratorium law, customs tariff, Cochabamba to Santa Cruz Railway, bills to create a bureau of agriculture and stock raising, a national agronomic and veterinary institute in Trinidad, potable water supply for La Paz, coining of money in Potosí, a school of agriculture and stock raising at Cordillera, subvention in the construction of hospitals in La Paz, colonization in Pilcomayo, and bills concerning the sanitation of cities and the laying of sewers.

On March 19 the President signed a law providing that all internal revenue, as well as the ordinary taxes enumerated in the law, shall be collected by the staff of the internal revenue and liquor bureau.

In February the Bolivian Government decided to annul the contract with Chandler & Co., of New York, in which the latter company was made the fiscal agent of Bolivia for the United States.

DEBT.

The National debt of Bolivia was officially estimated on June 30, 1919, as follows:

Foreign debt, mostly held in London, £3,114,682: 04:05.

Internal debt, Bs. 19,456,175.

Floating debt, Bs., 10,477,471.86.

The internal consolidated debt has been amortized by the calling in of customs bonds, from which during the last half of 1918 and the first six months of 1919 something more than 2,000,000 were realized. The issue of bonds of 1914 of the indemnity of Acre and of bonds of the internal debt, are being made in small sums in accordance with the laws authorizing them. The floating debt has been increased by the sum of \$1,000,000 American gold, provided for by a short-time credit opened by the National City Bank of New York with the national treasury.

None of the Bolivian municipalities have any external bonds outstanding. Some of the cities have borrowed sums for municipal improvements either from banks or from other local interests. None of these loans are large. Bonds of the city of La Paz, which are occasionally dealt in locally and which are entitled to interest at the rate of 10 per cent. per annum, sell at 60. Interest is said to be paid somewhat irregularly. La Paz is seeking arrangements whereby better sewerage facilities may be obtained and a filtration system provided for the purification of the water used in the city. The revenues of the two systems are offered as security. It is said that well-known American financial interests are investigating the proposition.

BANKING.

Previous to the banking reform, Bolivia had four Banks of issue, viz: the Banco de la Nación, the Banco Nacional, the Banco Mercantil and the Banco Argandona. These institutions together represented about Bs. 41,000,000.

A law promulgated on the 5th of January, 1911, created the Banco de la Nación, the only Bank of Issue that now exists in Bolivia. Its purposes were to better the economic conditions of the Republic; to control the finances of the country, to give stability to the fiduciary circulation, and to establish a firm rate of exchange with foreign markets.

In May, 1911, the Banco de la Nación started in business with a paid-up capital of £1,275,000 (English pounds sterling), or the equivalent of Bs. 15,937,500, shares to the amount of one million pounds being assigned to the Government and the rest to different stockholders. Many shares were taken by London and Paris bankers.

(For details of banking reform see Latin-American Year Book for 1919, pages 97-98).

The metal reserve of the nation has been increased by the sum of \$2,000,000 American gold which the Banco de la Nación imported, using for the purpose its deposit in the Federal Reserve Bank of New York.

On January 1, 1919, the amount of gold on deposit in the banks of Bolivia was as follows: Banco de la Nación Boliviana, 7,916,997 bolivianos; Banco Nacional de Bolivia, 3,467,519 bolivianos; Banco Mercantil, 1,622,350 bolivianos; Banco Francisco Argandona, 980,337 bolivianos; making a total of 13,987,203 bolivianos.

The Banco de la Nación of Bolivia, of which 65 per cent. of the shares are owned by the Government, declared on June 30, 1918, a net profit of 1,510,495 bolivianos, and on December 31, 1918, 1,558,295, or a total of 3,068,790 bolivianos. The reserves for the year were raised during 1918 to 2,000,000 bolivianos, which added to other convertible funds amounts to 2,009,381 bolivianos, representing 21 per cent. of the payable capital, putting the bank on a very solid basis. The circulation of the bills of the bank, amounting to 20,388,896 bolivianos on December 31, 1917, in 1918 went up to 25,984,984 bolivianos, or an increase of 5,596,088 bolivianos. The profits of this bank from the date of its foundation in 1911 up to the 30th of June, 1919, amounted to 15,762,249 bolivianos. The condition of the bank on the 30th of June, 1919, was as follows: Cash on hand 13,277,654 bolivianos; bills in circulation, 26,613,141 bolivianos; foreign assets, 18,434,302 bolivianos; deposits, 18,526,162 bolivianos; investments in notes, 36,510,374 bolivianos; net profits, 1,563,998 bolivianos.

The National Bank of Bolivia has increased its capital 1,000,000 bolivianos, selling all the new shares among its old stockholders at a premium of 50 per cent.

By legislative enactment of February 3, 1919, the moratorium for obligations payable in gold was further extended to September 30 of the same year in cases where the creditor did not accept payment in notes issued by banks of the Republic.

The net receipts of the Bolivian National Bank of La Paz amounted to 1,558,295 bolivianos, in the second half of 1918.

A presidential decree of March 10, 1919, authorized the Bolivian National Bank to import through the national customhouse of the north the following denominations of bills to replace those which, now worn out were to be burned according to legal procedure: One million one-boliviano bills; one hundred thousand 10-boliviano bills; fifty thousand 20-boliviano bills; and thirty thousand 50-boliviano bills.

Banking Holidays of Bolivia.

January 1, New Year's Day; February 16, Monday before Lent; February 17, Tuesday before Lent; February 18, Ash Wednesday; April 1, Holy Thursday; April 2, Good Friday; April 3, Holy Saturday; June 3, Corpus Christi; August 6, In-

dependence Day; November 1, All Saints' Day; November 2, All Souls' Day; December 8, Immaculate Conception; December 25, Christmas Day. The decree of September 10, 1903, limited all national holidays to one—the anniversary of the establishment of the Republic on August 6, 1825. On December 19, 1905, a new law designated "all the Sundays of the year" and the dates enumerated above as holidays. Outside of these dates no public office suspends business.

Commercial Credit.

Terms for commercial credits in Bolivia range from 90 to 120 and 150 days, it being sometimes stipulated that the date should only run from the receipt of the goods. The law provides that a renewal is not valid unless the renewed acceptance bears the signature of both drawer and drawee. As a rule, drafts are accepted only on the arrival of goods at the customhouse. Instructions should be given so as to protest in case of nonacceptance or nonpayment; whether documents are to be handed over on acceptance or only after payment (the latter being unusual); whether the shipper's agent or bank is to be allowed the power to extend; the interest charged on renewals and rebate on prepayment. Collection commission at La Paz and Oruro is one-half of 1 per cent, and in other centers 1 per cent.

POSTS AND TELEGRAPHS.

There are 317 post-offices in Bolivia.

There are about 4,000 miles of telegraph lines. Bolivia is in telegraphic communication with the rest of the world, by the lines of the Central and South American Telegraph Company, as well as by the railway telegraph lines to Perú and Argentina.

The receipts of the government telegraph system are, 363,595 bolivianos; the expenditures 803,678 bolivianos.

The President in his message to Congress on the 8th of August, 1919, stated that the mail and postal service in 1918 shows a considerable increase in postal money orders over the previous year, and that new offices have been established in several districts to improve the service. Six new lines are to be added to the telegraphic system, four of these lines being already under construction. Of the 24 telegraph offices in different districts 18 are Government owned and 6 are operated by individuals. A wireless service has been divided into three zones with central stations at Riberalta, Voacha, and Yacuiba.

In May 1919 the radio telegraph station of Cobija was opened to the public. Its installation was provided for in a contract entered into between the National Government and the Marconi Company.

A telegraph line is being built from La Paz to Parquetupio. In September last a night school for students of telegraphy was opened in the national capital.

PUBLIC WORKS.

Preliminary steps have been taken for installing an electric light and power plant at Trinidad, Department of Beni.

Work of the new Hospital at Potosí, the cornerstone of which was laid on November 10, 1918, has been commenced. The Hospital is to be modern in every respect, and will be equipped in the most scientific and up-to-date manner.

By laws of the National Congress the President is authorized to begin the laying of the sewerage systems of the cities of Cochabamba and La Paz, and with this object to obtain two loans of 1,000,000 bolivianos for Cochabamba and 2,000,000 bolivianos for La Paz.

The President has authorized the prefect of the Department of Potosí to contract a loan for highway construction. The principal is to be 500,000 bolivianos, with interest not to exceed 8 per cent. annually and 2 per cent. amortization fund. Of this sum, 400,000 bolivianos will be set aside for the construction of an automobile highway between Atocha and Tupiza, and 100,000 bolivianos for a similar road between Catagaita and Camargo.

The President of the Republic authorized the Municipal Council of the State of Potosí to negotiate a loan, not exceeding 200,000 bolivianos for the purchase and equipment of a house for the storage of provisions, issuing in payment therefor municipal bonds bearing interest at the rate of 8 per cent. per annum and containing provisions for a 2 per cent. annual amortization fund.

The Bolivian Congress appropriated 5,00 bolivianos to be expended in the construction of a highway from Tupiza to San Juan via Mochara.

A bill was introduced into Congress calling for the appropriation of 100,000 bolivianos to be used in furnishing the city of Santa Cruz with a supply of Potable Water.

RIGHTS OF FOREIGNERS.

An alien not over 60 years of age, upon proof of good moral character, desiring to establish himself in Bolivia will be granted the following privileges: The right to come into the country and be transported to the place of destination over the highways or railroads of the country. This right extends to his wife, and children; the free transportation of his baggage; the right to occupy public lands for agricultural purposes, stock raising, or any other useful industry.

Each immigrant may obtain 50 hectares (120 acres), the value of which is fixed at 14 cents per hectare. Children over 14 years of age secure 25 hectares extra. The immigrant may have the option of paying cash or in five-year installments. In the latter case 5 per cent. annually will be charged for the value of the land. The immigrants may freely select the land desired in the designated zone. Children over 18 years of age have the right to acquire separate land. No immigrant may possess more than three lots or sections by purchase of other means. In case

of purchase on time, the immigrant cannot alienate or mortgage the property, the Government having first lien on the land.

FOREIGN INVESTMENTS.

Bolivia seems to have been a favorite field for French investors, who have readily absorbed the external bonds, financed public utilities, and otherwise placed money in the development of the country. Probably France has invested in Bolivia between \$20,000,000 and \$25,000,000. British investments were recently estimated at \$17,519,400; Chile has several millions at stake in the Bolivian mines; while the United States, Germany, and, in a small way, Switzerland, have employed capital there. Germany has a large bank there, and numerous German merchants, previous to the war, handled a large part of the country's imports.

LIST OF PRINCIPAL DEALERS IN BOLIVIA.

(La Paz.)

Jewelry.

José Fernández, D. Rivero, J. Oliviera, Bernardo Sayler, F. Schohaus, J. de Serir.

Book Dealers.

Hnos. Arnó, La Universitaria, Yanacocha 114; Forges, González y Medina, El Siglo Ilustrado, 18c. Llosarri 24; Hnos. Lakermance y Co., Jugari 18-20-22; Isaac Sé Plaza, Ayacucho 99-101; A. Someo, Vazquez.

Notion Dealers.

Pedro Ardiles, Bianchi y Co., Fermin Causlecanqui, Chabanelis y Co., Vda. de Forques, Adolfo González, E. y W. Hardt, Harries Thompson y Co., Sebastian Jimenez, Kwong Sang y Co.

Mine Companies.

Araca Harrison Boettiger, Carlos Boch, Domingo Lorini, F. S. Sanchez, N. Berthin, V. Fargau.

Hardware Stores.

F. Arias, August Hanatt, Socabaya 81; Hnos. Lemaitre, Teatro 13; José Martorell e hijo, Comercio; Ricardo Pastor, Socabaya 28; Antonio Pérez, Abel Rios, Recreo 55; Rosendo Rios, Sarganara 31.

Custom House Agents.

Arnaya y Co., Hnos. Carliaga, Hnos. Cazorla, Damlsburg Schubering y Co., Dehesa y Co., F. Harman, Enrique Koste y Co., E. Luis y Co., Solar y Co.

Rubber Goods.

S. Alexander y Co., Rubler Bolivian, Pascual Cesarino, The Chicago, Benedicto Goltia, Bottiger y Harrison.

Importers and Exporters.

M. Erqueta; Federico Eulert, V. Farlan y Co., C. Franco, S. Froudentel, Gerdes y Kommert, F. Gerdes y Co., A. González.

Chemicals.

G. González, A. G. Grosso, D. Lorini, A. Orsucci, E. Sagarruaga, J. Salmon, A. Valle, E. Valle, A. Vargas, P. A. Vargas.

Druggists.

Botica Boliviana, Botica del Indio, Botica Central, Botica Paceña, Botica San Sebastián.

BRAZIL.

Brazil is the largest Latin-American country. Its area is a little larger than the continental United States, but its population is less than one fifth that of the United States. The density of population is comparable only to that of the more sparsely populated States—a little less than Colorado and a little over Utah. It is nearly sixteen times as large as France, and is the sixth largest country in the world.

Brazil attains its greatest dimensions between the Equator and the Tropic of Capricorn. It is almost wholly in the Southern Hemisphere. The only South American countries not in contact with it are Chile and Ecuador.

Its natural boundary on the east, and a greater part of the north for an extension of about 5,000 miles from Cape Orange, frontier of Dutch Guiana, to Chuy on the boundary line of Uruguay, is the Atlantic Ocean. From north to south the number of degrees are about 37, and between Pernambuco, on the eighth parallel south of the line, and the Cordillera of the Andes, there are as many east to west, or a distance of 4,350 kilometers.

To make up for the fact that there are few natural harbors or bays of great size—those of Sao Salvador, Bahia and Rio Janeiro being by far the most important—the river system is good. The volume of the Mississippi, is far less than that of the Amazon. This gigantic stream is 1,800 miles in length, and is so deep that its very slight incline is sufficient to give it an impulse powerful enough to retard considerably the speed of vessels bound up stream. While the average depth is 25 and the minimum 15 fathoms, depths of 50 fathoms in the estuary are common. Over 1,100 tributaries flow into this river. At its basin soil is so rich that for every bushel of maize, beans and rice planted, 800 are often harvested. Its lower part, from Manaus to the sea, appears to have been formerly a bay, 1,000 miles deep and 400 wide.

ONE OF THE WORLD'S WONDERS.

Where Argentina, Paraguay and Brazil meet, and the Iguasú river joins the Paraná, we find one of the world's wonders: the seven falls of the Paraná. The Iguassú itself is noteworthy for a vast semicircle of cascades, the largest of which is 200 feet high. There are several other rivers which empty themselves into the Paraná. At the Seté Quedas falls, or cataracts, it opens out into a lake $4\frac{1}{2}$ miles long by $2\frac{1}{2}$ miles wide, and after rushing through a profound gorge, falls some 310 feet, with a volume

of water averaging 13,000,000 cubic feet a minute, and reckoned at 4,300,000 H. P. From Guayara (Seté Quedas), the mightiest cataracts on earth, to the falls of Iguassú, is a distance of 125 miles. Above the latter falls, the column of mist is visible for a distance of 12 miles. The total width of the falls is 13,133 feet.

More than half of Brazil consists of an elevated plateau cut into by a vast number of rivers. The mean altitude is from 2,000 to 3,000 feet, with isolated ranges up to 7,000 feet, and one peak (Itatiará) reaching 9,000 feet. The highest summits are seen along the eastern side of the country, near the sea, and in the center three long chains separate by the basins of the São Francisco and Paraguay rivers.

CLIMATE.

The climate of Brazil cannot be spoken of as a distinct thing. The country is so immense and the topography so varied that it has at least three different zones. The latitude of Brazil has hardly anything to do with its climate. It is, of course, naturally warmer (on the coast) in the winter at Pará than it is at Rio Grande, but the maximum summer heat is in all probability quite as great in the latter State. The average temperature of Pará is 26° centigrade, or 78° Fahrenheit.

For complete details of climate division, see Latin-American Year Book, 1919, pages 104 to 106.

AREA AND POPULATION.

The census returns of 1900 and the estimated population in 1915 were as follows:

STATE	Area sq. miles	Population	
		1900 census	1915 Estimated
Alagoas	22,583	649,273	848,526
Amazonas	732,439	249,756	378,476
Bahia	164,643	2,117,956	2,746,442
Ceará	40,247	849,127	1,179,197
Espírito Santo	17,312	209,783	362,402
Goyaz	288,536	255,284	428,661
Maranhão	117,561	459,308	683,645
Matto Grosso	532,683	118,025	191,145
Minas Geraes	221,951	3,594,471	4,628,553
Pará	443,903	455,256	809,886
Parahyba	28,854	490,784	630,171
Paraná	85,451	327,136	554,934
Pernambuco	49,573	1,178,150	1,649,023
Piauí	116,523	334,328	441,350
Rio de Janeiro	26,634	926,035	1,325,927
Rio Grande do Norte	22,195	274,317	424,308
Rio Grande do Sul	91,333	1,149,070	1,682,736
Santa Catharina	28,632	320,289	463,997
São Paulo	112,307	2,279,608	3,700,350
Sergipe	15,093	356,264	426,234
Federal District	538	746,749	975,818
Acre Territory	86,638
Total	3,218,991	17,371,069	24,618,429

The area of the Acre Territory is about 72,000 square miles. This territory was purchased from Bolivia for about 10,000,000

American money. In 1902 the Territory asked to be admitted as a State.

Owing to the lack of funds, the census fixed for June 30, 1911, was postponed. The population of Rio de Janeiro was estimated at 128,637 in 1911, and 811,265 in 1906; in 1911, of Sao Paulo, 450,000; Bahia, 290,000; Pernambuco, 150,000; Belem, 200,000; Porto Alegre, 100,000; Manaus, 50,000; Nitheroy, 35,000; Santos, 35,000; Ceara, 33,000; Macelo, 33,000; Parahyba, 32,000; Sao Luiz, 32,000.

The population of the city of Sao Paulo, which in 1900 was 239,820 at the end of 1918 had reached 504,278—an increase of 115 per cent. in eight years. In 1900 there were 22,407 buildings in the city, valued at 33,306 contos. In 1918 fully 55,356 buildings were reported, valued at 89,456 contos.

The number of immigrants arriving in Brazil during the 10-year period from 1908 to 1917 was: 427,958 of which 384,248 were from European ports, 15 from Asiatic, 4,125 from African, 35,706 from South American, 3,833 from North American, and 31 from Australian ports. The following figures show the principal nationalities which arrived during this period: German, 20,328; Austrian, 14,905; Argentine, 1,215; French, 5,363; Spanish, 53,879; Dutch, 2,850; Italian, 35,816; English, 3,399; North American, 1,268; and Turco-Arabic, 17,291. Of the total immigrants arriving, 305,684 were males and 122,274 females.

In 1918, 20,501 immigrants, of which 12,531 were males, and 7,970 females entered the Republic through the ports of Rio de Janeiro, Santos, Paranagua, and Rio Grande. Of this number 8,182 were agriculturists, 735 artists, 7,694 laborers, and 3,890 were not classified.

893 families of immigrants, consisting of 2,707 persons, and 4,544 immigrants without families, entered the country during 1918 through Sao Paulo. The immigrants were of the following nationalities: Argentinian, 112; German, 1; Brazilian, 485; Belgian, 8; Chilean, 5; Chinese, 2; Colombian, 1; Danish, 2; French, 211; Greek, 8; Spanish, 790; Dutch, 4; Italian, 215; English, 67; Japanese, 5; North American, 45; Norwegian, 2; Portuguese, 5,058; Peruvian, 6; Russian, 119; Roumanian, 5; Swiss, 15; Swedish, 3; Servian, 1; Turks, 37; and Uruguayan, 44. During the same period 4,069 emigrants left through the same port.

The Japanese emigrants to South America, especially to Brazil, are annually increasing. In 1908, the first year in which emigration to Brazil was encouraged, 700 Japanese left for that country; in 1910, the number was 800; in 1911, 1,500; 1912, 3,000; 1913, 3,000; 1914, 6,000; 1917, 3,000; 1918, 6,000. In 1919, the number, it is believed, exceeded 9,000.

AID TO IMMIGRANTS.

The Director of the Immigration Service has distributed to all the Brazilian consular offices a copy of the immigration laws now in effect as to the conditions in which immigrants are received in Brazil, as well as with regard to the aid allowed them by the Government.

The Government will furnish gratuitously to agricultural immigrants who arrive with their families, or at their request, food, medical treatment and medicines, in case of sickness at the time of arrival at the port of Rio de Janeiro, and during the unavoidable period before they can proceed to their freely chosen destination; freedom from duties for baggage, agricultural machinery or tools of their profession; transportation by rail or by water to port of destination, in accordance with the law in force; and information by means of interpreters who will accompany them whenever necessary.

Those immigrants who are on their way to the Federal colonies will receive, in addition to the concessions named above, transportation by rail to the location of the colony; food for a period of from three to six days; employment or job work in the construction of railways, etc., so that each adult of a family receives remuneration for 15 days' work per month, medicines and diet, free, during the first year of settlement; medical treatment until the colonist may be independent; free distribution periodically of workmen's tools, seeds, plants, etc.; schools for the instruction of elementary farming to the children of from 6 to 14 years, with the free distribution of books and necessary supplies to the children of poor settlers; facilities for the quick handling of mail; information on their rights and obligations, etc.

Land for Settlers.

The amount of land assigned to each settler is 25 hectares (about 62 acres), and is sold at the price of 8 to 30 milreis per hectare. There are farms with houses and without houses, these being sold for the cost of improvements. The Immigration Service will provide temporary quarters for those settlers who wish to erect a dwelling for their own account. Amortization on the debt of the colony must be begun at the end of the third year, and in annual payments thereafter for a period of from five to eight years. After the land is paid for, the legal title will be transferred to the immigrant. The Government will refund to the immigrants located in the Federal colonies the amount of their passage from the country of emmigration to Brazil, by crediting it to their account.

The Brazil Takushoku Kaisha contracting for the Japanese Colonization of Iguape in the State of Sao Paulo at the end of 1918 owned 17,120 hectares. Most of this real estate is occupied by Japanese colonists, and a few natives as shown in the following figures: Japanese, 306 families composed of 1,134 persons, and 5 Brazilian families composed of 24 persons. All the colonists are engaged in the cultivation of sugar cane, mandioca, grains, and especially rice.

From January to September, 1918, the agricultural colonies maintained by the Brazilian Immigration Service produced a total revenue of 504,898 paper milreis (\$126,224 American currency).

Within the last five years the revenue derived from these colonies has increased considerably: 60,879 paper milreis in 1914; 101,957 milreis in 1915; 186,755 milreis in 1916; 342,139 milreis in 1917; 504,898 milreis in 1918.

The population of the colonies at the beginning of 1918 totaled 33,721 inhabitants, of which 10,413 were native-born and 23,308 foreigners.

Expenditures for the establishment of new colonies during the four years previous to 1918 have been: 808,956 paper milreis, in 1914; 2,426,836 milreis, in 1915; 2,849,941 milreis in 1916; 4,309,041 milreis in 1917.

The value of the agricultural and industrial products during the same period was: 2,247,248 paper milreis in 1914; 6,132,812 milreis in 1915; 8,411,774 milreis in 1916; 10,631,930 milreis in 1917.

In the southern States there are prosperous German, Russian, and Italian colonies. In Rio Grande do Sul there are about 200,000 Germans; in Paraná, 180,000; and in Santa Catharina, 85,000. The colonies maintained by the Union are nineteen, as follows: Affonso Penna (founded in 1908), in the State of Espirito Santo; Visconde de Mana (in 1908), and Itatlaya (in 1908), in the State of Rio de Janeiro; Joao Pinheiro (in 1908), and Inconfidentes (in 1908), in that of Minas Geraes; Bandeirantes (in 1908), and Moncao (in 1910), in that of Sao Paulo; Ivahy (in 1907), Tayo (in 1908), Iraty (in 1908), Vera-Guarany (in 1909), Senador Correia (in 1907), Jesuino Marcones (in 1907), Cruz Machado (in 1910), Apucarana (in 1912), and Yapo (in 1913), in Paraná; Annitapolis (in 1908), Senador Esteves Junior (in 1910), and Rio Branco (in 1913), in Santa Catharina.

POLITICAL ORGANIZATION.

According to the Constitution adopted by the National Congress on February 24th, 1891, the Brazilian nation is constituted as the United States of Brazil comprising twenty States, one National Territory and one Federal District. Each of the old provinces forms a State, administered at its own expense without interference from the Federal Government save for defense, for the maintenance of order, and for the execution of the Federal Laws. Fiscal arrangements in such matters as import duties, stamps, rates of postage, and bank-note circulation belong to the Union; but export duties are the property of the various States.

The Legislative authority is exercised by the National Congress with the sanction of the President of the Republic. Congress consists of the Chamber of Deputies and the Senate. It meets annually on May 3rd, without being convoked, unless another day be fixed by law, and sits four months, but may be prorogued or convoked extraordinarily. No member of Congress, after his election, can contract with the executive power or accept any commission or paid office, except in the diplomatic or military services. If in ordinary circumstances, the acceptance of diplomatic or military office would cause the loss of the Legislative service of a member, the permission of the Chamber is required. Nor can any member of Congress take part in the administration of any company which receives a subsidy from the Federal Government. Deputies and Senators

are paid, and neither can be Ministers of State, and retain at the same time their seats in Congress. Deputies must have been Brazilian citizens for four years. Senators must be over thirty-five years of age and must have been citizens for six years.

The Chamber of Deputies consists of 212 members elected for three years by direct vote (providing for the representation of the minority), in a proportion not greater than one to every 70,000 population as shown by a decennial census, but so that no State will have less than four representatives. It has the initiative in Legislation relating to taxation, and in proceedings against the President of the Republic and Secretaries of State.

Senators, which number 63, are chosen by direct vote, 3 for each State and for the Federal District, for nine years, and the Senate is renewed to the extent of one-third every three years. The Vice-President of the Republic is President of the Senate.

The executive authority is exercised by the President of the Republic. He must be a native of Brazil, over thirty-five years of age. His term of office is four years, and he is not eligible for the succeeding term. The President and the Vice-President are elected by the people directly, by an absolute majority of votes. The election is held on the 1st day of March in the last year of each presidential period in accordance with forms prescribed by law. No candidate must be related by blood or marriage, in the first or second degree, to the actual president or vice-president or to either who has ceased to be so within six months. The President appoints and dismisses ministers, is in supreme command of the army and navy, and, within certain limits, has the power to declare war and make peace. He (with the consent of Congress) appoints the members of the Supreme Federal Tribunal and the diplomatic ministers. No minister can appear in Congress, but must communicate by letter, or in conference with a commission of the Chambers. Ministers are not responsible to Congress or to the Courts for advice given to the President of the Republic.

The franchise extends to all citizens not under twenty-one years of age, duly enrolled, except beggars, 'illiterates', soldiers actually serving, and members of monastic orders, etc., under vows or obedience.

PRESENT GOVERNMENT.

President Epitacio Pessoa was inaugurated in Rio de Janeiro, on July 28, 1919.

On July 27 he had announced his new Cabinet. His appointments proved to bring a complete change in the personnel of the various ministries. His appointees were for the most part men who have not been classed among the strong and active politicians of Brazil, but have been selected from outside the "logical" circles of candidates. For the first time since Brazil was a monarchy, the army and navy are headed by civilian ministers.

The Cabinet is made up as follows: Minister of the Interior, Dr. Alfredo Pinto; Minister of Foreign Relations, Dr. Azevedo Marques; Minister of Marine, Dr. Raul Soares; Minister of War,

Dr. Joao Pandiá Calogeras; Minister of Finance, Dr. Homero Baptista; Minister of Transportation, Dr. José Peres do Rio; Minister of Agriculture, Dr. Simoes Lopes.

The new President is a lawyer by profession and has occupied the chair of law in the University of Pernambuco. He was a member of the Congress which discussed and framed the present Constitution. He was Minister of Justice, member of the Supreme Federal Court and a Senator of the Republic. He belongs to none of the active political parties.

Before taking oath as president, he visited the United States and was the object of very cordial demonstrations. In a statement issued at that time, he outlined the program of the government he intended to develop. He said that he would follow a policy of closer relations with the United States and would promote the moral and economic development of Brazil. He considered education as one of the principal aims of his government. He would devote himself to the promotion of agriculture, transportation, to the development of live-stock industry and also to the manufacturing industries.

The Minister of Foreign Relations, Doctor Azebedo Marques, is one of the most eminent lawyers in Brazil especially known in the State of Sao Paulo.

The Minister of Agriculture, Doctor Semois Lopes, is an engineer from the State of Rio Grande do Sul, where he owns large farming interests. He has for several terms represented his state in the National Congress.

The Minister of the Treasury, Doctor Homero Baptista, is one of the most prominent financiers of Brazil. He represented in Congress the State of Rio Grande do Sul. He was a member of the Board of Directors of the Bank of the Republic and in this capacity he showed great administrative ability.

The Minister of Transportation, Doctor Peres do Rio, is an engineer, very well-known for his works on river navigation. He is expected to develop river navigation in Brazil where the system of rivers is so complete and important.

The Minister of Marine, Doctor Raul Soares de Mora, a lawyer of the State of Minas Geraes where he has a reputation as a very clever and well-meaning man.

The Minister of War, Doctor Calogeras, was for many years member of Congress for the State of Minas Geraes. He was a Minister of Finance in one of the previous administrations and demonstrated unusual executive ability.

The Minister of Justice, Doctor Alfredo Pinto is a prominent politician of the State of Minas Geraes. He was chief of police during the government of President Affonso Penha.

An arbitration convention with Peru, concluded on July 11, 1918, and which had previously been approved by the Brazilian Congress, was ratified by the President of Brazil on December 23, 1918.

SEMI-PRECIOUS STONES.

The best agates are derived from Rio Grande do Sul, generally found as water-worn pebbles. Every variety is seen there.

as well as jasquer, onyx, sardonyx, chalcedony, cornelians, etc., from the amygdaloidal and porphyritic rocks at 30° south latitude, running west up the Uruguay to the Rio Negro.

Amethysts are found in almost all the States, but principally in Bahia, Minas, and Rio Grande do Sul.

The Anatase (Octahedrite) is common in the diamond-bearing gravels in Minas Geraes, in small clear crystals, often mistaken for the diamond.

The andalusites are found in fine crystals and rolled pebbles at Minas Novas, in different shades of grey, flesh, brownish red and green. They are frequently dichroic, and are then known locally as jacintho. Being harder than rock crystal when perfect, they are suitable for ring stones.

Aquamarines, in all shades, from bright to pale blue and greenish blue, graduating to colorless, are abundant in the districts of Minas Novas, Arassuahy and Theophile Ottoni. The principal area commences at the Itamaranduba River, thence northeast to the River Piahy near the mouth of the Arassuahy and north to Boqueirao, Porteiras and Salinas.

The asbestos, although found in several states in small quantities, are found in large deposits in Minas Geraes at Taquaral (Ouro Preto.)

Bismuth Sulphide (Radio-active) combined with uranium is found at Ancruzilhada (Rio Grande).

Chrysoberyl and Cymophane (cat's eye) are usually found in the Minas Novas district pebbles not larger than a bean; in the valley of the River Gravata and its tributaries; in the Serra do Urubu; in the Neves and Novo streams; and in the Rivers Piahy and Calhao, in quartz veins cutting through gneiss and in auriferous clays and gravels.

Splendid crystals of citrine (false topaz; also smoky quartz) have been found in the Serra dos Crystaes (Goyaz), one of which, a clear yellow brown was 4½x4 inches and valued at \$40.00.

DIAMONDS.

Bernardo da Fomela Lobo, a gold miner, discovered the first diamonds while working in a place in the Morrinhos River near Diamantina, in the year 1721. In the State of Minas in 1732, there were 40,000 men employed, and from 1732 to 1771 Brazil exported 1,666,569 carats, worth \$18,000,000.

The gems are found in a sort of blue clay deposit, in beds of a few feet in thickness, inter-stratified through a great mass of multi-colored clays, stained by oxides and organic matter. This surrounding rock consists of sand-stones and schists. The stones are quite small and of a greenish color, not averaging above 6 to 8 grains each. The two mines, Barra and Duro, were visited by Dr. Orville Derby. They were abandoned for years.

Operations are still proceeding by means of electric power at Bao Vista (Diamantina), and at Serrinha (Curralinho) satisfactory results are obtained.

The area in which the diamonds may be found is determined by the recognition of the diamond-bearing foundation, or at least in such quantities as would pay for exploitation on a large scale.

The most productive area, up to the present, lies between Sincora on the south, and Morro do Chapéu in the north. This is due either to the richness of the deposits or to the abundant water supply. The stones are not confined to any particular part of the lavras. At Morro do Chapéu they are found in one section of the series and at Lençoes and Andaraí in another.

In Brazil the diamond industry is carried on in quite a different way to that of South Africa. There are no great companies that hold a monopoly of the gems in a very extensive area; a licence is easily obtained, and the whole of the diamond fields are full of isolated prospectors, and small groups of men that have amalgamated their capital.

There were 456 claims in the Diamantine district producing gems worth \$1,000,000 from an area of 250,000 hectares in 1909, and in Minas there are about 437 claims.

The Companhia Brasileira Diamantífera was recently organized in Rio de Janeiro to develop the diamond mines at Moribeca and Boa Vista, in the region of Diamantina, State of Minas Geraes, Brazil.

The declared capital of the corporation is 3,000 contos of reis, divided into 150,000 shares of 20,000 reis each. Nearly the total capital is represented by properties belonging to the Sindicato Diamantino.

The directorate of the company comprises the following: Dr. André Gustavo Paulo de Frontin, president; Antonio Luiz dos Santos, secretary; Dr. David Draper technical director; Dr. Zózimo Barroso and Robert Holland directors.

COAL.

The war served to accentuate sharply the absence of adequate supplies of native fuel in Brazil. The restriction of imports, first from Europe and then from the United States as well, compelled this Republic for the first time in its history to depend upon its own resources.

A coal commission, appointed by the Federal Government, made an extensive examination of the coal fields of the country during 1904 and 1905 and reported the existence of coal suitable for briquetting in the three southernmost States, Rio Grande do Sul, Santa Catharina, and Paraná. Thin coal seams of inferior quality were also reported in São Paulo and lignitic coal has been discovered along the tributaries of the Amazon in the States of Pará and Amazonas. The oil resources of the republic are apparently confined to the oil of the Bahia region and a rather indeterminate area of scattered indications in the interior. Wood is the one native fuel which is abundant in all parts of the country.

Before the war, it was easier and cheaper to import coal than to attempt the mining of the native product which was inaccessible and of inferior quality. Fuel oil was apparently in little demand before 1913. Wood was used where coal could not be obtained but proved an expensive and wasteful fuel. Hence, prior to 1914, with the exception of wood, the greater part of the fuel used in Brazil was imported.

The restrictions placed upon exports of fuel by the Allies during the war and the accompanying high prices forced Brazil, temporarily at least, to resort in part to native fuel. Under this stimulus, Brazil began to exploit her native coal fields and experimented with oil extracted from Bahia Shale.

The official Brazilian statistics contrast the steady increase in the quantities of fuel imported during the four year period immediately preceding the war with the steady decrease during the war. The war period was characterized by two important factors: the increase in price of imported fuel and the shifting of the chief source of supply from England to the United States.

The imports of coal in 1910 were 1,774,140 metric tons; in 1911 they were 1,969,631 metric tons; in 1912 amounted to 2,319,808 metric tons, and in 1913 jumped to 2,530,156 metric tons.

The decrease of 27% in the imports of 1914, the first war year, as compared with those of 1913, the last pre-war year, is all the more marked when contrasted with the increase shown in the preceding year. In 1917, the imports of coal had dropped to only 877,675 metric tons.

In 1913 England supplied over 1,900,000 metric tons of coal, 237,000 tons of patent fuel, 14,000 tons of coke, and 900 tons of bitumen or about 86% of the total fuel imports for the year, while the United States only supplied 274,798 tons of coal, 2,200 tons of fuel oil, and 100 tons of bitumen or about 11% of the total imports for the year.

In 1917, the United States supplied 642,428 tons of coal, the principal item of import, or 78.5% of the total amount imported during the year, while England only supplied 172,866 tons or 21% of the total imports.

Imports of coal into Rio de Janeiro during August, 1919, totaled 44,620 metric tons, 43,770 tons being American coal and the remainder British. During the corresponding period in 1918 imports of American coal amounted to 85,129 tons, and of British coal to 9,273 tons.

The Federal Government is anxious to encourage the production of native coal and has agreed to give it preference whenever possible considering its prices and quality. Aid is to be given in the construction of railroads for transportation purposes and Government-owned ships are to carry native coal, coke, pitch, and the pyrites and residue from which sulphur may be made at the lowest possible rates. A Federal decree of March 30, 1918 authorizes the making of loans of coal-mining companies under certain terms.

The State of Rio Grande do Sul, Santa Catharina, and Paraná in southern Brazil all contain beds of bituminous coal. The coal deposits of Rio Grande do Sul are at present operated by three well-organized concerns. The Minas Coal Co. of Jacuhy was incorporated in April, 1917, to prospect and mine the coal veins of the Leao plantation in the municipality of Sao Jeronymo. This company began operations with a capital of 8,000 contos. They began the construction of a railway from the mines to port Maua on the Jacuhy River, a distance of 60 kilometers. The coal com-

pany has leases and purchased options on the Leao plantation and near-by lands covering an area of about nine square leagues. The prospecting of a section of this basin shows coal deposits estimated at 22,000,000 tons. Geologists who have studied the entire carboniferous section referred to are of the opinion that the basin contains some 500,000,000 tons of coal of an excellent quality. At the present time coal is being taken from surface veins. Recently two shafts, 140 meters deep, were sunk and a good quality of coal veins were encouraged. At the present time about 500 miners are employed by this company in taking out coal, and the number will probably be largely increased in the near future. These mines, which at first produced 1,500 tons of coal monthly, will soon have an output of 30,000 tons per month. Six locomotives and 90 coal cars are used in hauling the coal to the fluvial port where it is loaded on barges and sold principally to the Lloyd Brasileiro Steamship Co.

Another company operating in the State of Rio Grande do Sul is the Sao Jeronymo Railway & Mining Co., with a capital of 6,000 contos and a monthly output of 15,000 tons of coal which it is expected to increase soon to 30,000 tons. This coal property covers an area of 2,179 hectares, and the coal available for extraction is estimated at 10,000,000 tons.

The Riograndense Coal Co. has lately been organized with a capital of 1,000 contos. This company proposes to operate the Butia mines.

Dr. Gonzaga de Campos, director of the geologic and mineralogic service of Brazil reports that in the State of Sta. Catharina are four important coal basins which have not yet been explored in the south of said State, namely, Alto Tubarao, Alto Mai-Luzia or Treviso, Crissiuma, and Urussanga, near the sources of the river of that name. Lage Bros., who have just completed the construction of a railway connecting with the Thereza Christina line, work the first deposit, shipping therefrom 1,200 to 1,500 tons of coal per month. The Treviso field has numerous veins of coal, and the Urussanga coal deposits are of great importance because of the numerous veins which extend through the valleys of the upper streams which enter that river on the right-hand bank. The Urussanga Coal Co. has commenced the exploitation of the coal of the valleys of the Deserto and Calti Rivers.

The Government has contracted with the Aranja Coal Co. for the construction of 30-kilometer spur from its branch railway for the purpose of giving a better outlet for the coal output of the Deserto and Calti mines.

Operations have commenced in the Jaguarao River valley in the southern part of the State of Rio Grande, near Rio Negro, Candiota, and Santa Rosa. This coal is of the surface variety and is poorer quality than the Sao Jeronymo product. Abundant evidence of favorable outcroppings in the Jacuhy valley indicates deposits besides those now being developed.

The firm of Lage Irmaos which operates in the Tubarao district is reported to be producing from 60 to 70 tons daily and is desirous of developing its properties further. It is reported the output could be increased to between 300 to 400 tons per day.

The Barra Bonita Mining Company was organized June 12, 1918 under the laws of Brazil with a capital of 2,800 contos represented by 14,000 shares of 200 milrêis each all of which has been fully paid up. The majority of the stock is owned by the Federal Real Estate and Mortgage Company.

The Companhia Industrial de Gandarella, a corporation with headquarters at Rio de Janeiro, has been incorporated for the purpose of exploiting deposits of coal, iron, manganese, and other minerals in the "Gandarella" property in the municipality of Santa Barbara, State of Minas Geraes. The company is incorporated for 3,000 contos which may be increased to 5,000 contos. Of the initial capital stock, 2,500 contos is represented by property and 500 contos by cash subscribed. The stockholders are all Brazilians.

The Carbonifera Riograndense Companhia has received Government loans amounting to \$375,000.

GOLD.

Although there are many deposits in other states, the principal gold fields of Brazil are in the State of Minas. Formerly this precious metal was worked by placers in the Cantagallo district, in the State of Rio. The gold here was derived from gneiss, and the small deposits in the River Iguassú and others in the same state were from the same foundation. Fresh finds are still being made in spite of nearly 350 years of mining. Some nuggets were discovered at Montes Carlos weighing up to 1½ lbs. Within three years an alluvial deposit at Alho d'Agua yielded \$1,000,000 of gold.

The Bandeirantes from Sao Paulo were first to prospect in the State of Goyaz which is very rich in gold placers. Caravans assembled from all parts of the country, and mining camps often contained 30,000 people.

Largely because of over-capitalization, dredging in Matto Grosso has hitherto not proved a success. The rivers have gentle currents with little declivity, the bedrock being soft and the alluvian fine. There is sufficient supply of wood for fuel.

Morro Velho, at Villa Nova de Lima, near Sabara, is the principal gold mine in Brazil. Since 1830 the mines has been working, almost without interruption. It was first commenced in 1725, as an open working and was thought to be exhausted at the end of the century.

Ouro Preto (Passagem), 5 miles from the town, is the only other important mine at present working. The ore is hauled up three inclined planes, diverging at the entrance and the deposit consists of quartz, pyrites and scharl (massive tourmaline). The other minerals found in the lode are Kyanite, Calcite, Monazite, Graphite, Garnets, Andalusite, and Cerium and Tellurium, all in very small quantities.

For a length of quite 200 kilometers, the Serra do Espinhaco is auriferous. Recent analysis gave an average of 15 to 20 grammes per ton for about 200 deposits.

The Brazilian Gold Fields, Ltd., at Lavras, S. Gabriel, in Rio

Grande do Sul, has, out of 100 square miles in the district, 24 square miles of claims.

IRON.

Mountains of iron ore are found in Brazil in the form of magnetite, hematite, and canga, in the States of Sao Paulo, Santa Catharina, Espirito Santo, Bahia, Matto Grosso, Minas Geraes, and Rio Grande do Sul.

Magnetite, or magnetic oxide, occurs in octahedral crystals, isolated or in masses, for which, in a state of purity, the chemical formula is Fe_3O_4 . The best known deposits are those of Minas Geraes and Sao Paulo, containing 67 per cent. of iron. These are the biggest deposits in the world.

Hematite is common in the south, as also itabirites. On the coast boulders of hematite are found containing 30 per cent. of manganese.

In Minas alogiste constitutes regular mountains, and, like that of Itabira do Campo in the Serras do Caraca and Espinhaco, are inexhaustible.

Canga is inferior to the other three varieties, in consequence of the iron being mixed with fragments of quartz and argillaceous rock. It is extensively found in the central States and yields up to 50 per cent. iron.

It is believed that in the near future active work will begin in the great iron ore district of the State of Minas Geraes. Judging by the size of the deposits it is evident that when this development takes place there will be required a large amount of modern machinery and electric power to operate it, which will in practically all cases be derived from hydro-electric works. The railway that will tap this district, known as the Victoria-Minas Road, will be electrified for several hundred kilometers.

The mining capital is principally British, with a small amount of Belgian. American interests are also represented in Brazil's iron ore fields by the Brazilian Iron & Steel Co. Their properties are located in the eastern part of the Minas Geraes district near the head waters of the Doce River. The most important British companies are the St. John del Rey Mining Company and the Itabira Iron Ore Company.

The richest mineral zone of Brazil lies in the heart of the Republic, in the State of Minas Geraes. The name Minas betrays both its past traditions and its hopes for the future. Gold, silver, iron, manganese, diamonds, or other precious stones abound in the central and northern Provinces.

The largest mine is the Mina do Morro which played a prominent part in American industrial life during the war, when large quantities of this mineral were required for the manufacture of steel.

A Brazilian firm owns this mine. The total invested capital is approximately \$600,000, two-thirds of the stock belonging to the company. A total of 1,600,000 tons of manganese ore has already been exported in the history of the mine, and it is estimated that there is still in sight a total of about 10,000,000 tons, covering an area of 150 hectares, the average thickness of the

manganese deposits being about 200 meters. The ore is 48 to 50 per cent. pure, although the percentage runs much higher in some cases.

The exportation of 1917 was about 200,000 tons and in 1918 about 300,000. With the close of the war there has been a sharp drop both in the amount exported and in the price received for the ore.

The labor conditions in connection with this mine are exemplary. In 1916 about 1,000 men were employed. The number in June, 1919 was only about 700, due to the reduced output of the mine.

Although the existence of manganese was known many years ago, its presence in such large quantities in Brazil was only realized about 25 years ago. The veins which are at present being worked were discovered in the excavations for the Central Railway of Brazil.

The oldest and most important mine in Brazil is that called Morro Velho, located at Villa Nova de Lima. It has been worked since 1725. The surface working being apparently exhausted, the mine was abandoned toward the end of that century. Work was resumed in 1830 by the company owning it at present and has been continuous since that time. The mine has been under the management of one man since 1886. Under his administration it has become a model of organization and efficiency, in spite of the numerous problems which he has confronted and in addition to the technical difficulties which have had to be surmounted.

Subsidiary enterprises developed by the company are a plant for reducing arsenic from the residuous sand after the gold and silver have been extracted; large plantations of eucalyptus for the manufacture of charcoal, which it is proposed to use in charcoal smelters for the reduction of iron ore; grazing and agriculture on the holdings of the company; and the sanitary administration of a town of over 12,000 inhabitants.

The Iron Smelter at Sabana, State of Minas Geraes, one of the largest and most important installations of its kind in South America, will soon be completed and put into operation. The daily capacity of the plant is from 25 to 35 tons of ore. The company has a large quantity of fuel and raw material on hand.

Col. Itara, a Japanese subject, who is now studying the capacity of the iron and manganese smelters in the central and southern States of Brazil, as well as the value of Zirconium, a new metal known to exist only in the State of Sao Paulo, reported that said metal is the hardest in the world and that its quality is superior to that of the best steel. As the mining wealth of Brazil is incalculable, Japan proposes in future to be one of the largest buyers of Brazilian ores.

OIL.

The Government of Brazil is interested in the development of petroleum resources and will furnish free information, maps, etc., to private companies that will exploit oil territory. Recent discoveries of oil have been made in Bahia, Alagoes and Sergipe.

The Parahyba shale is reported to be richer than that of Scotland; the former producing 165 liters of crude oil per ton, an oil content of 16½%, the latter producing 100 liters, an oil content of 10%. Portions of the shale suitable for distillation have been reported at the following localities; along the Itahipe River, north of Ilheus; on the Island of Joao Thanis in the Marahu River 80 miles south of Bahia; on the Tinhare Island 30 miles south of Bahia; at Riachadoche and Camarajibe 25 and 45 miles, respectively, north of Macelo; in Alagoas, and in Coara.

A large deposit of bituminous shale exists in that district, which has been worked since 1884.

The Federal Government appointed a Committee of Engineers and Financiers to make a technical and economic study of the petroleum wells discovered in the State of Alagoas.

Andrade Auto and Cia. control a working concession in the State of Alagoas, about 10 kilometers from the capital city, which is connected by rail with the ports of Pernambuco and Macelo. The oil from these wells is said to yield a fairly high-grade of gasoline suitable to be used by automobiles and motor boats. The company is capitalized entirely by local people. A strong company backed by Brazilian and American capital was formed to exploit a petroleum deposit near the town of Rio Claro in the State of Minas Geraes. The plans of the company include the construction of a railroad to link their property with the nearby town of Rio Claro. The initial capital amounts to five million milreis.

An Italian and Brazilian company has commenced the exploitation of oil fields at Tiete, State of Sao Paulo. These deposits have been favorably reported on by a party of Brazilian and American engineers.

OTHER MINERAL PRODUCTS.

Rock crystal is common in many states but exported chiefly from Goyaz (Serra dos Crystaes), via Uberaba and Santos.

The largest deposit of saltpetre is in the Chapada, in an area of 12,500 kilometers in the limestones and shales. The caverns in Central Minas contain some deposits of saltpetre, especially in the basins of the Rio das Belnas and Sao Francisco. None of the Brazilian deposits are large.

Near Ouro Preto in a matrix of lithomarge and chlorites, combined with small angular fragments of partly decomposed quartz is where the yellow and orange topaz is principally mined. The surrounding rocks are itacolumites and clay slates. Here is seen every fine pink and rose crystals, and some having the color of the Calais ruby are found.

In Minas marble of very pure white, rose, and onyx is worked, and in the Bahia Chapada, the vermillion, straw-colored, and blueblack, as well as many other varieties. There are also many fine deposits near Paty de Alferes in the State of Rio, and black marble of excellent quality at Sao Roque, and Sao Paulo.

The best quality of mica comes from Goyaz, but the principal exportation is from Santa Lucia de Carangola, Minas. The

average size of the plates, 6x6x3 inches. It is put up in boxes of 100 lbs. weight, and the expenses entailed are: Extraction, freight, etc., to the railway \$250 per ton; freight to Rio \$5.; export tax, \$30.; freight and insurance to Europe, \$35.; total, \$320.; average value, \$750.

Platinum is disseminated through the auriferous jacutinga in Gongo Socco, between the itabirites; also in gold-bearing quartz amongst crystalline schists in Pernambuco; and also in the diamondiferous cascalho on the east side of the Epinhaco, from Itambe de Matto Dentro to Itambe da Serra (Minas) and the Abaeté River and its tributaries, in deposits derived principally from olivine matrices.

The principal copper deposits are at Camaquã (Rio Grande do Sul), where it is found in gabbro and sandstone. The ore of the four veins worked was concentrated on the spot to 28 per cent. pure. Thirty grammes of gold is contained in each ton of mineral.

Brazilian monazite sand, which is largely mined in the State of Espírito Santo, is usually sold in either the Rio de Janeiro or the Victorian market. Before the war a German trust was the only purchaser of monazite sand and virtually ruled the market. All transactions relative to shipments were conducted through in Rio de Janeiro, which had contracts with the trust. At the present the only firms engaged in the business and operating their own mines are: P. S. Nicholson & Co., Rua Visconde de Inhaúma 8, Rio de Janeiro; H. M. Sloat, Avenida Rio Branco 109, Rio de Janeiro; and the Société Minière, Rio de Janeiro.

MINING COMPANIES.

The following are important concerns engaged in mining in Brazil, besides those mentioned above:

North of Brazil Finance and Developing Co., Ltd. Office, 6 Queen St. Place, London, E. C. Capital \$157,000 (U. S.)

The Barcellos Corporation (Sociedade Anonyma Barcellos), a Brazilian mining company has been incorporated in Rio de Janeiro City with a capital of 600 contos to engage in the mining of manganese ores.

By decree of December 11, 1918, the Vice President of Brazil ad interim authorized the "Kaigai Kogyo Kabushiki Kaish" (International Development; Limited), to engage in emigration and colonization projects, and related maritime, industrial, and mineral industries. Its capital stock is declared at 9,000,000 yen (\$4,482,000), divided into 180,000 shares of 50 yen each.

The company's head office is in Tokio, with Brazilian headquarters.

LIVE STOCKS.

According to statistics published in the Jornal do Brasil, there were in Brazil in December, 1918, 37,500,000 head of cattle of various kinds distributed by classes and breeds as follows:

Cattle	Native	Indian	European
Milk cows	8,000,000	3,900,000	4,200,000
Calves	4,750,000	2,550,000	1,800,000
Yearlings	2,300,000	1,300,000	850,000
Beef cattle	2,450,000	1,250,000	950,000
Oxen and bulls	1,500,000	1,000,000	700,000
Total	19,000,000	10,000,000	8,500,000

The Minister of Agriculture instructed the Director of the Bureau of Live Stock Industries, to study the question and propose the best means of applying during the last fiscal year the Government appropriation set aside for the purpose of assisting cattlemen in the importation of pure-bred animals, and for the purchase of breeding cattle for the various breeding posts, the model stock ranches, and experimental stations maintained by the Department of Agriculture. The Bureau of Live Stock Industries, invited all of those interested in the importation of blooded animals to send in their orders. Over 150 orders were received from cattle raisers in the State of Rio Grande do Sul, Sao Paulo, Minas Geraes, Rio de Janeiro, Bahia, Alagoas, Pernambuco, Ceara, Piahy, Maranhao, and Par , and the value of foreign animals desired, including cost and freight, made a total of 6,991,166.

But the amount set aside by Congress for this purpose is only 600 contos gold of which 200 contos must be spent on animals for the Department's own stations, so that it was impossible for the Government to fill all the orders. The Director of the Bureau of Live Stock Industries, therefore, recommended that all of the orders for Indian or Zebu cattle, which represented more than half the total, be rejected.

According to data published by the Department of Agriculture of the United States, Brazil occupies the second place in the world's production of hogs, with 17,327,210 head, as compared with 67,766,000 head in the United States which occupies the first place.

The principal sheep-raising States are Sao Paulo, Rio Grande do Sul, and Minas Geraes, where the breeding has received considerable attention. The breeds thus far introduced are: Southdown, Romney, Marsh, Hampshire Down, Oxford Down, Merino, Turco, Lincoln, Rambouillet, etc. The State which appears to be best fitted for sheep raising is Rio Grande do Sul, where the Southdown, more commonly known as black face, is preferred owing to the facility with which it adapts itself to climatic and pastoral conditions there.

In Sao Paulo, as well as in Par  and Santa Catharina, much attention is being given to the intensive raising of superior races of sheep known only a few years in this country. It is believed that on the plains of the northern part of Rio Grande do Sul, Santa Catharina, and Par  at an altitude of 600 meters or more above sea level, the temperature and other conditions are more favorable than the same latitudes of Australia and the Republics of Argentina and Uruguay. Taking into consideration the weight and quality of wool, it is believed that in time under proper development the sheep in this section of the country

will compete very favorably in the world markets with those of New Zealand and the River Plate.

According to the census of 1916, Brazil possesses 6,619,550 goats. The largest goat herds are found in the following States: Alagoas, 251,680; Bahia, 2,779,280; Ceara, 464,740; Maranhao, 218,060; Minas Geraes, 426,330; Parahyba, 841,190; Pernambuco, 710,830; Piahy, 420,820; Rio Grande do Norte, 352,000; Sao Paulo, 364,610.

In 1916 the Brazil herd counted 7,204,920 head of sheep. Of this number there were in Bahia 1,841,900 head; in Pernambuco, 356,520; in Piahy, 256,060; in Rio Grande do Norte, 207,610; in Rio Grande do Sul, 2,622,920. The remainder was distributed throughout Brazil.

In the interior of Brazil, the Caracu, Franqueira, Curraleiro, Mocho, and Pantaneiro, native types of cattle, have been known for many years. In addition, the following foreign breeds have been imported and successfully raised: Holland, Flemish, Swiss, Guernsey, Limousine, Hereford, and Sebú.

The Swiss, Holland, and Guernsey breeds show the greatest resistance to climatic conditions. The Swiss type has done most to regenerate native breeds, and reaches the highest degree of development in weight, production of milk, and adaptation to environment in Brazil. Despite its easy adaptation, special pains must be taken in breeding the Holland cattle, good pasturage, humidity, and low altitude being essentials. The Guernsey, although quickly adapted to new environment, loses in part the properties of fat contained in its milk and its production is diminished.

The coefficient of mortality of the Flemish type is about 33 per cent. during acclimatization and though it become perfectly adapted, it is inadvisable to introduce it into regions of high altitude or scanty pasturage. Limousine cattle become thoroughly adapted to the climate of the country under all conditions of temperature and pasturage.

The Brazilian Government is devoting a great deal of attention to the encouragement of the live-stock industry. Government financial aid is granted under a Decree the principal provisions of which are:

To the stockmen and farmers who import, with the consent of the Ministry of Agriculture, Commerce and Industry, breeding animals of good constitution and perfect state of health, the Federal Government will concede aid—providing that there may be a law to this effect in the respective budgets—in addition to transportation of the animals into the country.

For cattle the Government will give, in addition to transportation into the country, immunity against tick fever.

The aid is applied to animals of the following breeds:

Cattle—(a) Hereford, polled Angus, Sussex, Shorthorn, Limousine, and Charoleza; (b) Swiss, Simmenthal, Friburgueza, Normanda, Red Lincoln and South Devon; (c) Holland, (Holstein-Frisian, Jeverland), Flemish, Guernsey, and Jersey.

Hogs.—Yorkshire, Berkshire, Large-Black, Poland-China, and Tamworth.

Sheep.—(a) Merinos: Rambouillet, Vermont, and German; (b) English: Romney-Marsh, Oxford-Shiredown, Shropshiredown, and Southdown.

Goats.—Saannen, Toggenburg, Murcia, Angora, Malteza.

Horses.—(a) Pure-blooded Arab, Anglo-Arab, and pure-blooded English; (b) Hackney, Norfolk-Bretao, and Orloff; (c) Perciaron and Ardennez.

Mules.—Catalonian, Italian, and Poitou.

Aid is only given to each farmer or stock raiser for the importation of not more than 10 animals of each species.

Aid may be conceded for more than 10 animals of one species at the discession of the Minister, to companies or agricultural enterprises of more than 300,000 milreis capital, to breeding stations and posts, schools, and any other institution for agricultural education founded by the initiative of the States or municipalities, or by live-stock associations, syndicates or cooperative agricultural associations.

The live-stock or agricultural societies which, directed by Brazilian citizens, are formed in foreign countries for the purpose of promoting the development of the live-stock industry in Brazil, have the right to receive the same aid.

The State of Bahia is reported to be about to establish two model stock farms, one near Bonfia and the other near Mundo Novo. The Government has appropriated \$125,000 for this purpose.

FORESTRY.

A large proportion of the Brazilian territory is forests, some of which have not even been explored. An immense variety of woods are found there, for cabinet, dying, tanning, and medical uses. The wealth of Brazil in forestal products is beyond calculation, but the lack of transportation facilities prevents its development in a large scale.

The forest area of Brazil is estimated at 1,500,000 square miles or about 48% of the total area of the country. The Federal Government has so far left this valuable reserve unprotected by any form of forestry code but has recently begun to encourage reforestation. Under decree of March 6, 1918, various inducements were offered which included, provided certain specified conditions were fulfilled, free distribution of seed, grants of Government land to be used for this purpose, and premiums to be awarded for well-developed eighteen month old trees.

Brazil should become one of the world's principal sources of lumber for building and industrial purposes. Except for the great interior plateaus of Minas Geraes and Goyaz and the agricultural areas to the south and east, its timberlands and forests stretch from the shores of the Atlantic Ocean straight west to the summits of the Andes. Probably no list has ever been prepared that includes all varieties of woods to be found in this great area, but an idea can be obtained from the fact

that more than 300 species have been recorded in the State of Sao Paulo alone. Other less accessible areas would doubtless show a much larger variety.

From 1910 to 1918 the exports of woods in general increased fourfold, and more than two-thirds consisted of pine wood furnished by the States of Paraná and Rio Grande do Sul.

In 1918, the exports of woods amounted to \$5,272,500, of which \$4,206,250 was the value of pine woods exported.

The centers of Brazil's woodworking industry may be briefly classified as follows: The Amazon district and extreme north for dyewoods; Rio de Janeiro and Sao Paulo, the great wood-working centers; and Paraná, the home of Brazil's soft wood. There are also one or two very large sawmills in the State of Rio Grande do Sul, and small mills and carpenter's shops are scattered throughout the State of Sao Paulo to the number of 517.

COFFEE.

Coffee is the most important agricultural product of Brazil. The Brazilian production surpasses that of all other countries combined. Most of it is exported, so that economic conditions in Brazil are dependent to a large extent upon the situation of the coffee market in the world. It can be said that Brazil produces more coffee than can be normally absorbed by the other countries.

Coffee is grown in Brazil principally in Sao Paulo, Minas Geraes, Rio de Janeiro, and Espirito Santo. The plants flower from September to December; earlier in the north later in the south. The crops are gathered from April to July or August, or during the dry season.

The coffee production in Brazil in 1917-18 amounted to 17,000,000 sacks, as compared with 22,000,000 sacks representing the world production during that year. This was the largest on record with the exception of the production of 1906-7 which amounted to 23,786,000 sacks, of which 20,190,000 represented the output of Brazil.

The arrivals in Santos during the season, 1918-1919, were 7,397,560 bags, as against 12,143,930 bags in 1917-1918. The crop had been estimated officially to be 8,258,000 bags.

This difference goes to show that the frost in June, 1918, had not only damaged the 1919-1920 crop, but also the last crop, that is, in those parts where the growing fruit had not yet developed sufficiently. A great deal of coffee was lost through the fact that in consequence of the cold weather many trees lost their leaves, which, dropping to the ground, covered the fruit lying about the bottom so that its separation became almost impossible. The majority of the Fazendeiros had far overestimated their crop and there are only few who really got what they had expected. Almost nobody had foreseen the consequences of the frost on the then growing crop.

The official estimate of the Government of Sao Paulo, published on July 28, 1919 gave the following figures:

BRAZIL.

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	Bags
Crop of the State of Sao Paulo	3,368,750
Coffee from Minas and Paraná	450,000
Total	3,818,750
Less Brazilian consumption	180,000
Total	3,818,750

Senor Manoel Lopez de Oliveira Filho, one of the most competent specialists of Brazil, estimated as follows:

	Bags maximum
Total Santos crop	3,000,000
Crop of Rio de Janeiro	3,000,000
And of Espirito Santo, and Bahia	1,000,000
Total	7,000,000

Some authorities estimate the 1920-1921 crops:

	Bags
For Santos	6,000,000
Other States of Brazil	5,200,000
Total	11,200,000

Others think that there will be rather 8,000,000 to 9,000,000 bags for Santos next year than 6,000,000 bags. Many Fazendeiros think that the next crop will be good. Numerous coffee trees have recovered and are laden with dark green leaves, a sure indication of their vigor. However, this is exact only in part. There are only a few Fazendeiros who really work their own fazendas themselves, and it will be best to figure on 6,000,000 bags for the next Santos crop.

According to the Bureau of Industry and Commerce of the Department of Agriculture the coffee crop of Brazil for 1919-20 was 3,368,750 sacks of Sao Paulo coffee, 430,000 sacks of coffee from Minas Geraes, and 20,000 sacks from Paraná, making a total of 3,818,750 sacks.

The same authority states that of the 791,256,000 coffee trees then bearing 390,584,000 were seriously damaged by the frost of 1918. The zone of greatest destruction was the district through which the Sao Paulo Railroad runs, several municipalities losing from 70 to 90 per cent. of their coffee trees.

RUBBER.

There are ten species of *havea*, the rubber producing plant; according to "Flora Brasiliensis," besides a similar plant, *Micrandra sipronides*; *Micrandra etata* in Minas, and *Micrandra bracteosa* in Bahia. The *tapurú*, the *Castilloa elastica*, and the *Harcornia speciosa* of some six kinds can be found in Amazonas.

There are about fifty-two companies with a total capital of \$10,000,000 in operation, which were organized in 1907 and 1908 when the rubber industry made more progress.

The exports of crude rubber from the Pará rubber district decreased from 36,918,687 kilos for 1917 to 27,722,795 kilos for

1918, and it was estimated that there would be a further decrease.

The total exports of crude rubber from Pará and Manaus, Brazil, and Iquitos, Peru, during the month of September, 1919, amounted to 8,325,830 pounds, compared with 4,536,360 pounds for the corresponding month in 1918. Shipments aggregated to the United States 7,771,744 pounds and to Europe 554,086 pounds, compared with 4,242,333 and 139,654 pounds, respectively in 1918.

SUGAR.

The increase in sugar exports from Brazil during the war was the revival of an old industry rather than to the creation of a new one. Sugar cane is raised all along the coast but the industry is centered in the State of Pernambuco. The exports in 1915 were 59 million kilos; in 1916 amounted to 53 million kilos, and in 1917 reached 131 million kilos.

Great Britain, formerly the chief market for Brazilian sugar, failed to increase her imports in proportion to the increase in production in Brazil. In 1913 she imported over 95% of the total amount exported while in 1917 she imported less than 20% of the total. Argentina was forced by the three poor yields of her own sugar crops of 1915, 1916, and 1917 to import from Brazil; she has been one of Brazil's best customers and bids fair to absorb a considerable quantity of this year's crop. Uruguay also increased her imports during the war and Italy entered the market practically as a new customer.

The exports for the first four months of 1918 amounted to only 28,170 tons, a decrease of nearly 45% as compared with the exports of the same period for 1917. This falling off was ascribed to two causes: the lack of shipping space to European ports and the decrease in shipments to the Argentine. Early in the season, the 1918 sugar crop in Argentina was reported to be good and the quality of the sugar to be high but these expectations did not materialize owing to adverse weather conditions so that Argentina must again import between 60,000 and 70,000 tons of sugar. Consequently, Brazilian sugar has risen in price rather than declined and shipments of sugar for July show a marked increase.

Sugar cane thrives very well in Brazil, where it was introduced by the original settlers. It is grown in practically all the States of Brazil, and the 1919 crop was estimated at no less than 400,000 tons of sugar.

The State of Pernambuco is credited with 2,500,000 bags of 60 kilos; Rio de Janeiro, 1,100,000 bags; Sergipe, 800,000 bags; Sao Paulo, 500,000 bags; Alagoas, 500,000 bags; Bahia, 450,000 bags; Minas Geraes, 250,000 bags; Parahyba, 150,000 bags. The other States produce less.

The cultivation of sugar cane in Brazil has not reached the degree of perfection which it attained in Cuba, Hawaii, Java, or Demerara. The country offers boundless possibilities for development of the canefields, as far as nature and quality of the land are concerned. But Brazil has not the excellent service of the

Cuban railroads, connecting every field, warehouse or sugar mill with the main line, nor the efficient labor of the Spaniard from the Continent or the Canary Islands.

The following figures of the sugar exported from Brazil show the little influence the war has had to stimulate the planters, and in spite of the high prices Brazilian sugar exports reached their maximum in 1917, with only 38,000 tons: 1913, 5,371 tons with an average price per ton of \$58.56; 1915, 59,170 tons, average price, \$60.26; 1916, 54,938 tons, average price, \$112.70; 1917, 138,159 tons, average price, \$132.14; 1918, 115,634 tons, average price, \$220.36; January to May, 1919, 18,374 tons, average price, \$182.74.

At the present moment all exports of sugar are stopped, because the price in Brazil is higher than that offered on the foreign markets.

Planting takes place between July and September and cutting from September to March. In the north, 14 to 15 months is necessary for the cane to ripen while in Sao Paulo 18 to 20 months is required. The yield runs from 20 to 30 tons per acre and the cost of production is estimated to be about 2¼ cents a pound.

In 1917, there were 76 large sugar mills in Pernambuco, 31 in Rio de Janeiro, 25 in Bahia, 20 in Sao Paulo, and 15 in Sergipe. In addition to these large mills, numerous small mills are scattered throughout the country; there being some 1,500 in Pernambuco alone. The leading qualities of sugar produced are white mill, crystal, second and third grade crystal, sorts, *somenos*, *mascavinho*, crystal *smarollo*, *mascavo bom*, *mascavo regular*, and *mascavo baixo*, which is the lowest.

CEREALS.

Wheat, in the colonial times, was grown in the States of Rio Grande do Sul, Santa Catharina, Sao Paulo, Minas Geraes and Rio de Janeiro. In the early part of the nineteenth century, however, it was abandoned. Various diseases, such as rust, carbuncle and caries was the real cause of this cessation. Various attempts were made with more or less success in Ceará and Parahyba and in Minas Geraes, but were also finally abandoned. Today, the great English flour mills, the largest in the southern hemisphere, at Rio de Janeiro are supplied almost entirely with Argentine wheat.

Sao Paulo and Rio Grande do Sul are the principal food producing States of the Republic. Sao Paulo has recently turned her attention from coffee to other crops, the chief ones being rice, beans, corn, sugar cane, mandioca, tobacco, potatoes, pineapples, bananas, and cotton. The following crops in 1917 were rice, 2,616,666 bags; beans, 2,956,850 bags; corn, 11,659,400 bags.

The chief crop of Rio Grande do Sul is corn. Other important crops include beans, rice, alfalfa, potatoes, grapes, onions, barley, oats and wheat. Owing to lack of transportation facilities, corn and some of the other crops named above are utilized principally in stock and hog raising. The production for 1916-1917 was in metric tons:

Corn, 1,580,000; beans, 78,000; rice, 111,515; alfalfa, 126,000; wheat, 84,000; mandioca, 120,000; onions and garlic, 85,000; potatoes, 165,000; herva-matte, 166,000; grapes, 84,000; sugar cane, 27,000.

Santa Catharina and Parana, the two states just north of Rio Grande do Sul, are primarily agricultural; rice being one of the principal crops of the former, and wheat of the latter. Rio de Janeiro, north of Sao Paulo, raises rice. Perambuco raises corn also.

Brazilian rice farming is admittedly not conducted in an up-to-date manner; no selection of seeds is made; and the young plants are often left to take their own course. The usual planting season extends from August to December and the harvest is gathered in March. The approximate cost of production is \$17, American currency, per acre, and the usual yield varies from five to twenty bushels.

Beans have long formed an important part of the diet of the lower classes of Brazil, but it is only since the war that this foodstuff has been produced within the country in sufficient quantity to meet the demand.

There are three varieties of beans now quoted for export on the Rio and Santos markets; the black bean, the white, and the "mulatinhos" or brown bean. There is little demand for the black and white beans, but the mulatinhos find a ready market.

According to forecasts made by the food administration of Brazil, the wheat crop of the states of Parana, Santa Catharina, and Rio Grande do Sul, in 1919, would be 350,000 tons of which 200,000 would come from Rio Grande do Sul.

The cultivation of hops and barley, which were formerly imported from Europe for the manufacture of beer, is rapidly being developed in Brazil. Barley is being cultivated in increasing quantities in the State of Santa Catharina, and in other southern states of the Republic, while recently its cultivation was begun in the State of Minas Geraes.

The production of maize in Brazil places that Republic among those of the great maize producing countries of the world. Brazil exported during the year prior to the European War only 2,400 kilos of maize. In 1915 there were no exports of this cereal from Brazil, but in 1917 the exports of this grain amounted to 24,048 tons, and rose in 1918 to 5,000,000 tons. During the latter year the area in Brazil under maize cultivation was 3,058,043 hectares. The states having the largest area under cultivation were Minas Geraes, Rio Grande do Sul, Sao Paulo and Parana. The average yield per hectare was about 100 bushels, and the approximate value of the crop was 518,000 contos.

On July 12, 1919 the First National Exposition of grains was held in Rio de Janeiro under the auspices of the Permanent commission of Expositions, headed by the Minister of Agriculture. The States of Sao Paulo, Minas Geraes, Perambuco, Rio de Janeiro, Parana, Santa Catharina, and the Federal District were all represented by noteworthy exhibits.

COCOA.

The cocoa plant is native to Brazil, in the region of the Amazon valley, but now it is cultivated as far south as Sao Paulo and

Southern Matto Grosso; and the coast of South Bahia and Northern Espirito Santo, and Rio de Janeiro, is admirably adapted for its growth when the swamps are drained. It begins to produce well at a distance of six or more kilometers from the sea, and thrives until the colder elevated regions are reached, doing best at an average day temperature of some 80 degrees Fahrenheit.

The cocoa crop for the year 1919-1920 is estimated at 800,000 bags of 132 pounds each. There is a possibility of 1,000,000 bags if conditions remain favorable. The first crop will be small and late. This usually indicates that the second crop will be heavy. The quality will depend upon the weather. The present market price is 11 to 15 cents per pound.

The exports of cocoa in bags of 60 kilos from the port of Bahia for the month of July 1919, amounted to 41,533 bags, of which 19,032 were for New York.

The July shippments are part of the first crop that proved a failure in the year. The second crop, it was reported, would be one of the largest in the history of the State, and is estimated at 900,000 bags.

COTTON.

The State of Sao Paulo is given first place among the cotton producing states with 110,000,000 pounds and 330,000,000 pounds in seed in the abundant crop of 1918-19.

After Sao Paulo the producing states are, in the order of production: Parahyba do Norte, with 39,600,000 pounds; Pernambuco, with 24,750,000 pounds; Ceara, 22,000,000 pounds; the crop of 1919 being insignificant, due to the drought; Para, 17,870,000; Alagoas, 17,600,000; Maranhao, 7,154,730; Bahia, 5,500,000; Minas Geraes, 5,500,000, the crop of 1919 being larger; Matto Grosso, 5,759 pounds, exported to Sao Paulo; and Amazonas, 2,200 pounds.

The position of the states as regards consumption is as follows: Sao Paulo, 55,000,000 pounds; Alagoas, 13,200,000 pounds; Bahia, 9,330,772; Minas Geraes, 8,800,000; Maranhao, 5,227,200; Ceara, 4,400,000; Santa Catharina, 2,640,000; Parahyba, 990,000 pounds. It was not possible to compute the consumption of cotton in the State of Pernambuco because of the fact that the factories had been working irregularly.

The outlook for the cotton producer is bright. All the states of Brazil, principally Sao Paulo (which produces in its districts of Sorocabana, Paulista, and Mogyana the finest grades), encourage the planting of cotton. Cotton is planted in these districts between the rows of coffee trees, and naturally benefits by the cleanings and the intensive cultivation given to the coffee plantations. The northern states of Brazil may find it difficult to keep step with such progressive States as Rio de Janeiro, Minas Geraes, and Sao Paulo.

Should ever the production of cotton exceed the country's demands, and the price offered by exporters not be remunerative to export the surplus, one would imagine there would exist an unlimited use in Brazil for this product in the manufacture of cotton bags, and cotton cloth as a substitute for the jute bags

and cloth imported and consumed in amounts of millions of bags.

The exportation of cotton from Brazil in 1918 by countries of destination was:

France, \$42,500; Argentina, \$106; Cape Verde, \$316; United States, \$38,040; United Kingdom, \$1,289,763; Portugal, \$1,037,226 Uruguay, \$16,975. Total, \$2,424,926.

Samples of cotton grown in the State of Sao Paulo, were recently sent to cotton brokers at Liverpool by the British Chamber of Commerce of Sao Paulo for examination, and orders were given for a considerable quantity of this cotton to be sent to Lancashire for use in the looms there. The fiber is shorter than that produced in the States of Ceara and Pernambuco.

The 1919 cotton crop was very promising. A sufficient rainfall and no very serious damage on the part of the pink bollworm, together with a more general interest on the part of planters themselves and the introduction of modern machinery, all tended to make this crop a large one. While the average annual yield is about 1,000,000 bales, the estimate for 1919 was placed at 1,600,000 bales of 80 kilos.

The Brazil Department of Agriculture maintains a staff of experts who visit the various cotton producing centers and assist the planters in the selection of seed, proper culture, and especially in combating insect pests.

FRUITS.

Brazil possesses climates suitable for the growth of every kind of fruit known.

The coconut is the principal fruit exported. The coconut zone of Brazil lies along the seacoast from Sergipe to Maranhao and thence to Pará, and in the Amazon Basin from the coast to the River Madeira. The alluvial lands of the Amazon Basin are especially adapted to the cultivation of coconuts because of their periodical inundations. In 1917 there were reported to be some 1,250,000 coconut trees in Brazil, with an annual yield, per tree, of 40 nuts which were of good size comparatively, 5,000 being required per ton of copra.

Copra (or coconut meat) production is still in the experimental stage in Brazil.

The Brazilian Government is endeavoring to encourage the systematic cultivation of coconut palms and the exportation of copra.

THE MATTE.

To Chile, Paraguay, Brazil, Uruguay, and Argentina, Matte (*Ilex paraguayensis*) is what tea is to the European. In many places it is even more used than coffee. It is found exclusively in a temperate region at an altitude of from 1,500 to 3,000 feet above sea level. Paraná is the seat of its exportation. It is a small plant, some 12 to 20 feet high, and rarely, if ever, reaches 30 feet. In Paraná alone it is distributed over some 140,000

square kilometers and it is found in six other states, as well as in a small part of Argentina and Uruguay.

OTHER AGRICULTURAL PRODUCTS.

There are about 14 to 15 native kinds of Quinas which furnishes cinchona, or Peruvian bark. The true Peruvian cinchona has been introduced with great success. Angelica, quassia, gentian, centuary, rue, and many purely Brazilian species or bitter tonical plants abound in all the states.

The collectors of Ipecacuanha found very largely in the State of Matto Grosso, take up and dry the roots, observing that one is left to propagate wherever a plant is found. In Brazil, the price is about \$5 per kilogram.

The least exploited, and yet one of the greatest sources of wealth of Brazil is the fibre-producing plant. Brazil is perhaps the richest country in the growth of this plant.

If properly prepared the guaxima vermelha, it is considered, would rival the canhamo (hemp). Guaxima vermelha, since colonial days, has been used in making ship's cables. The name of aramina is used for both urena and triumphete, which under favorable conditions, not too dry, produce fibres of 8 to 9 feet in length. About 12,500 acres in Sao Paulo are under cultivation and produce nearly 800 tons of fibre yearly, practically all of which is consumed by one factory in the capital of the state.

The tobacco crop in 1920 is estimated at 350,000 bales of 154 pounds each. The quality is poor, because of wet weather at the wrong period. The average price for the 1918 crop was 12½ cents per pound, and this year's crop will sell about 30 per cent. higher.

In 1918 the exports of tobacco from Brazil amounted to 2,263,000 pounds, as compared with 1,296,000 pounds in 1917, and 1,551,000 pounds in 1916. The State of Bahia is the largest producer of tobacco in Brazil, and the Argentine Republic the largest foreign purchaser of Brazilian tobacco.

The heavy frosts which occurred in Brazil in 1918 greatly damaged the castor bean plant, so that the quantity of that oleaginous seed available for export from the Republic in the near future will be very limited.

The plant known as aninga is a native of the State of Para, Brazil, and it is declared that this State alone is capable of producing 100,000 tons annually for export. The aninga constitutes the raw material from which cellulose for the manufacture of linen paper is obtained. The fibers may also be transformed by a chemical process into an artificial cotton fiber. The fact that this fibre does not decay gives it an advantage over that obtained from analogous plants. The aninga grows along the banks of all the rivers of Para, which have a slow current, permitting a soft bed of mud for their roots.

The price of the fiber at Para is 300 to 350 reis per kilo. It is stated that the head of the Para State Chemical Laboratory has discovered a new process for dissolving the fiber of prime quality.

At a session held May 7, 1919, of the Permanent Commission of Expositions, over which the Minister of Agriculture presided, resolutions were passed for arranging the following expositions:

July 12, 1919, the first exposition of cereals, including cereals of all sorts, vegetables, horticulture, floriculture, ornamental plants, seeds, bulbs, agricultural and gardening implements and accessories. Foreign exhibits are invited to this exposition.

August 30, 1919, exposition of aviculture, and domestic animals, promoted by the Brazilian Society of Aviculture.

September 20, 1919, the second great annual fair, organized and under the auspices of the Rio de Janeiro municipal government. (This fair includes exhibits of all sorts.)

January 24, 1920, the fifth large exposition fair of fruits, vegetables, flowers and agricultural industries, including demonstrations of cleansing, classification, preserving, etc., to which foreign products were admitted.

The reclamation of arid lands in Brazil is receiving the attention of the Government, and the legislation recently urged upon Congress by President Pessoa will probably be passed.

AGRICULTURAL AND LAND COMPANIES.

A large number of companies, with foreign capital, are interested in agricultural and land enterprises in Brazil. The most important, besides those already mentioned, are:

Alto Paraná Development Co., Ltd. Main Office, River Plate House, Finsbury Circus, London, E. C. Capital, \$3,300,000 (U. S.) Owns about 678,500 acres of cedar, pine and hardwood forest in Paraná, Brazil, and a saw mill at Corrientes.

Brazilian, Canadian and General Trust Ltd. Main office, 16 and 17 Broad St., Ave., London, E. C. Capital, authorized, \$1,000,000 (U. S.); issued, \$750,000 (U. S.). Carries a general financial business.

Brazilian Development Syndicate, Ltd. Main office, 71 George St., Edinburgh, Scotland Capital, \$50,000 (U. S.).

City of Sao Paulo Improvements & Freehold Land Co., Ltd. Capital, \$10,000,000 (U. S.). Owns about 14,806,597 square yards land in the City of Sao Paulo, Brazil.

Minas Geraes and Espirito Santo Exploration Co., Ltd. (Brazil). Main office, 3 India Ave., London, E. C. Capital, authorized, \$650,000 (U. S.); issued, \$393,030 (U. S.). Lumber and other concessions.

At Cachoeira, State of Rio Grande do Sul, an agricultural society, with a capital of 400 contos, has been organized to engage on a large scale in the cultivation of rice, the planting of trees, and the raising of stock.

The Companhia Combustivel Nacional has obtained a concession from the Government of the State of Rio de Janeiro for the working of the peat beds situated at Maché, in that State.

The President of Brazil, by decree of September 6, 1918, has authorized the opening of a credit of 100,198 milreis to assist in the maintenance, during the present year, of 96 schools, which were established in the agricultural colonies of the State of Parana.

INDUSTRIES.

Although by no means considered a manufacturing country, Brazil has made commendable progress along certain lines.

Among various lines of manufacturing the textile industry has taken a high place, there having been in existence two years ago 303 factories, employing 74,609 operatives, the invested capital totaling 368,144,000 milreis, and the annual output 278,289,950 milreis.

The cotton mills are the leaders in the textile field, their annual output totaling 237,499,000 milreis. Many of these are large companies, their shares being widely held locally and considered substantial and profitable investments. The following list shows the capitalization and output, both in milreis, of the most important cotton mills:

Progreso Industrial do Brazil, of Rio de Janeiro, capital, 13,600,000, output, 8,800,000.—Confianga Industrial of Rio de Janeiro, capital, 13,000,000, output, 8,500,000.—Fiacao e Tecidos Allianca of Rio de Janeiro, capital, 12,750,000, output, 6,800,000.—Fiacao e Tecidos Botafogo of Rio de Janeiro, capital, 12,000,000; output, 10,200,000.—Fabrica Volorantim of Sorocaba, capital 10,000,000; output, 6,400,000.—Brasil Industrial of Paracambi, capital, 9,800,000; output, 6,000,000.—Companhia Petropolitana of Petropolis, capital, 9,000,000; output, 6,000,000.—Manufacturados Fluminense of Nictheroy, capital, 9,000,000; output, 4,200,000.—Fiacao e Tecidos Corcovada of Rio de Janeiro, capital, 8,730,000; output, 5,200,000.—Fiacao e Tecidos Carioca of Rio de Janeiro, capital, 8,400,000; output, 6,300,000.—Cotonificio Rodolpho Crespi of Sao Paulo, capital, 8,000,000; output, 3,900,000.—America Fabril of Rio de Janeiro, capital, 7,600,000; output, 5,600,000.—Emporio Industrial do Norte, of Sao Salvador, capital, 6,740,000; output, 4,000,000.—Industrial Pernambucana of Camaragibe, capital, 6,000,000; output, 3,500,000.—Sao Bernardo Fabril, of Sao Bernardo, capital, 5,700,000; output, 2,500,000.—Industrial Reunidas F. Matarazzo, of Sao Paulo, capital, 5,000,000; output, 5,400,000.—Fiacao e Tecidos de Pernambuco, of Torre, capital, 5,000,000; output, 4,500,000.—Societa Italo-Americana of Salto de Itd, capital, 4,725,000; output, 3,000,000.—Fabril Paulista of Recife, capital 4,600,000; output, 4,000,000.—Valencia Industrial of Valencia, capital, 4,135,000; output, 2,400,000.—Estamparia Ypiranga of Bairro Ypiranga, capital, 4,000,000; output, 2,900,000.—Progreso Industrial da Bahia, of Sao Salvador, capital 3,742,000; output, 3,200,000.—Fabrica Paulistana, of Sao Paulo, capital, 3,600,000; output, 1,410,000.—Fiacao e Tecidos Sao Bento of Jundiary, capital, 3,500,000; output, 2,050,000.—Fiacao e Tecidos N. S. da Ponte, of Sorocaba, capital, 3,500,000; output, 2,000,000.—Otherer Speer & Cia., of Sorocaba, capital, 3,500,000; output, 2,500,000.—Industrial do Rio Grande do Norte of Natal, capital, 2,800,000; output, 720,000.—Industrial Sul Mineira of Itajuba, capital, 2,800,000; output, 981,000.—Fiacao e Tecidos Cometa of Petropolis, capital, 2,800,000; output, 2,500,000.—Fiacao e Tecidos Mageense of Magé, capital, 2,750,000; output, 2,600,000.—Fiacao e Tecidos S. Martinho of Taubaty, capital, 2,500,000; output, 2,000,000.—Taubaté Industrial of Taubaté, capital, 2,500,000; output, 1,085,000.—Paulista Anigen of Sao Paulo, capital, 2,500,000; output, 2,000,000.—Fiacao e Tecidos Santo Aleixo of Santo Aleixo, capital, 2,400,000; output, 960,000.—Tecidos Porto-Alegrense of Porto Alegre, capital, 2,300,000; output, 1,500,000.—Pinotti Gamba & Cia., of Sao Paulo, capital, 2,250,000; output, 1,850,000.—Sao Pedro de Alcantara of Petropolis, capital, 2,200,000; output, 1,300,000.—Industrial Mineira of Juiz de Fora, capital, 2,200,000; output, 1,800,000.—Industrial Estancia of Estancia, capital 2,200,000; output, 1,500,000.—Alagoana de Tecidos of Cachoeira, capital, 2,000,000; output, 2,000,000.—Fabrica Maranhense of Sao Luiz, capital, 2,000,000; output, 1,500,000.—Fiacao e Tecidos Rio Andl of Sao Luiz, capital, 2,000,000; output, 2,000,000.—Tecidos S. Italo-Brasileira of Sao Paulo, capital, 2,000,000; output, 2,000,000.

The great industrial center of Brazil—which is not generally recognized as having greatly developed its manufactures—is Sao Paulo. The industries of Sao Paulo are extremely numerous. At least one-fifth of the 500,000 people of the capital city are en-

gaged in manufacturing and kindred industries, and it ranks as one of the three great manufacturing cities of South America.

The manufacturing industries in this district include a large number of establishments, many of which are small and employ only few workmen. The character and the number of factories follow: Hats, 269; shoes, 68; hosiery, 21; white goods and shirts, 21; gloves, 20; sugar mills, 769; sugar refineries, 309; alimentary pastes, 218; canned goods, 27; packing houses, 2; crackers, 103; preserves, 174; milling of cereals, 541; mandioca flour, 231; dairy products, 53; vinegar, 34; breweries, 270; brooms and brushes, 19; soft drinks, 200; furniture, 304; vegetable oil, 6; starch, 2; rope, 16; trunks and bags, 56; harness and saddles, 248; tanneries, 6; paper and pasteboard, 3; articles of metal, 7; machinery, 65; foundries, 62; wood-working, 558; brick and tile, 972; lime, 47; wagons and carriages, 383; railway machine shops, 18; matches, 12; soap, 195; candles, 19; oil and resins, 30; paints, 9; chemical products, 18; pharmaceutical products, 9; cigars and cigarettes, 158; and others, 932.

The following is a list of the principal local manufacturing companies, and their capitalization:

Companies	Outstand- ing.	Par value.
	Milreis	Milreis
Armazens Frigorificos	6,000,000	200
Brasileira de Automoveis	2,000,000	200
Brasileira de Carnes Congeladas	1,000,000	100
Brasil de Telegrapho sem fio	300,000	200
Docas de Santos	60,000,000	200
		100
		100
Explosivos de Seguranca	600,000	
Geral de Melhoramentos do Maranhao	3,200,000	100
Pernambuco	6,000,000	200
Industrial de Melhoramentos no Brasil	1,000,000	100
Melhoramentos na Bahia	6,000,000	200
Melhoramentos no Espirito Santo	250,000	200
Melhoramentos de Sao Paulo	6,000,000	200
Porto de Victoria	3,000,000	200
Sampalo Correa & Cia.	1,350,000	200
Technica e Importadora	200,000	200
Viacao e Construccoes	1,500,000	200

The recent establishment of five cotton factories in the city of Sorocaba, State of Sao Paulo, and the proposed installation of two other factories there in the near future, is evidence of the great development which the cotton industry is undergoing in Brazil.

According to the Bureau of Commercial Statistics of Brazil, the exports of woven fabrics to the Argentine Republic during the months of 1918 following the holding of the Brazilian Exposition of Fabrics in Buenos Aires were, in February, 64 kilos; in May, 16 kilos; in June, 922 kilos; in July, 49,761 kilos; and in August 1,869 kilos, or a total of 52,612 kilos. From the 1st of January to the 31st of August 1918, Brazil exported to the Argentine Republic 146,532 empty sacks.

During the period of the war, the industrial growth of the State of Sao Paulo was exceptional. What was valued in 1914

at 212,231 contos of industrial production, in 1917 went up to 562,381 contos. The principal increase was noted in textiles, hats, shoes, and manufactured drugs.

The Brazilian textile industry is passing through a serious crisis and urgent action is imperative to save it from annihilation. Already some of the manufacturers have closed their doors and others have reduced their forces. Through a legislative act of January 13, 1919, all manufacturers of Brazil (citizens only) who possessed textiles or raw materials, were permitted to contract a commercial loan of 50,000 milreis with the Bank of Brazil. However, this aid has not been given and the condition of the industry becomes more critical daily.

The two snap fasteners factories, which operate in Sao Paulo, turn out first-class goods at prices which, in connection with the customs duty, render it almost impossible for the foreign manufacturers to compete.

Three factories manufacture seamless silk hosiery, and the demand for this quality of goods is supplied by these mills.

On March 11, 1919, the manufacture of steel by means of the Tropena furnace was established in the arsenal at Rio de Janeiro. The steel produced will be utilized in the manufacture of different pieces for ship construction.

Five paint factories are in operation at Rio de Janeiro, and others at Sao Paulo and Parana. Brazil is the largest importer of red lead from the United States, having taken 887,699 pounds of this product in 1918.

There are nearly 5,000 shoe factories in Brazil, located principally in the Federal district and the States of Sao Paulo, Rio Grande do Sul, Parana, Minas Geraes, Rio de Janeiro, Bahia, Para, Pernambuco, and other States. Most of them, however, have a comparatively small output.

By a decree passed March 12, 1919, the Vice President of Brazil ad interim, authorized a special credit of 500,000 paper milreis, to the Ministry of Marine to be used to promote the fishing industry in Brazil, to the teaching of fishermen, and to cover other phases of this industry. The decree also authorizes the contracting of foreign specialists to assist in this work.

A factory for the manufacture of chinaware will open shortly at Porto Alegre, in the State of Rio Grande do Sul.

A paper mill, situated at Morretes, Brazil, has recently been equipped with American machinery, and is in a condition to produce a large amount of paper.

There are now nine tin-can factories operating in Brazil, only two of which are capable of a large production. The output of one establishment averages 275,000 tin cans a month, and that of the other is almost as large; the remaining factories are not equipped for extended manufacture. The cans are utilized for preserves, jellies, cheese, butter, lard, cigarettes, perfume, etc.

The awards made by the Ministry of Agriculture in regard to bids of various firms for the erection of caustic-soda factories were announced in November 1918. The first three winners are the Cia Nacional de Industria Chimica, A. Santos & Cia., and

Antonio Luiz da Silva. The total annual production of the factories erected by these companies will amount to 5,280 tons of caustic soda, about 3,220 tons less than the average yearly importation of this chemical during the last five years.

Credits in the following amounts have been opened to the winners by the Brazilian Government: Cia Nacional de Industria Chimica, \$228,937; A. Santos & Cia., \$316,724; Antonio Luiz da Silva, \$405,000.

In addition, since the Sociedade Anonyma "A Carbonica", already has nearly completed the erection of a caustic soda factory in Rio de Janeiro, having expended more than \$375,000 in the undertaking, this company has been conceded a loan not to exceed \$250,000.

The manufacturing industries in which leather is used are well developed in Sao Paulo, there being 68 shoe factories in the State, of which 17 are large and well equipped. Two manufacturing factories of leather belting, two cloth factories, seven traveling-bag factories, and a number of furniture factories, which turn out leather-covered furniture, and a harness and saddlery factory are also in operation in the State. There are 12 tanneries, but only four of these are of any importance. These tanneries produce heavy leathers of good quality, and one factory produces glazed glove and shoe leather from sheep hides.

These factories work up about 25 per cent. of the hides produced in Sao Paulo, and for their encouragement the State levies a tax of 3 milreis (about 83 cents) on each hide imported. However, these tanneries have certain difficulties to contend with in the matter of the quality of the hides produced in this region. One of the leading tanners in this territory produces belting leather, sole leather, and a certain amount of fine calf leather. A considerable amount of American leather of finer quality is imported, to be used in the manufacture of shoes and for upholstery.

An English company has arranged to establish a button and comb factory in the city of Pelotas in southern Brazil. A factory for the manufacture of canvas bags recently began operations in Pelotas.

MEAT INDUSTRY.

The development of the meat industry in Brazil has been very rapid. The exports of meat products doubled in one year.

A syndicate has been formed in London, with a capital of \$5,000,000, for the purpose of stock raising in South Brazil, and an American company has obtained concession of lands in Piahy for the same end.

There is a large extract of meat factory in Matto Grosso, owned by a Belgian company, and 60,000 oxen are slaughtered annually. One-fifth of the total number of cattle in the Republic is found in Rio Grande do Sul.

Brazil exported between January 1, 1915, and October 31, 1918, a total of 126,419 tons, 9,562 tons, and 119,620 tons of frozen meats, dried meats, and hides, respectively.

No appreciable exportable surplus of pork can be anticipated before 1921, when large packing plants will be in operation and the hog industry stimulated.

There are a number of foreign companies engaged in the packing of meat industries in Brazil. The most important are the following:

Anglo-Brazilian Meat Co., Ltd. Main offices, 1-4 Giltspur St., London, E. C. Capital, authorized, \$700,000 (U. S.); issued, \$575,000 (U. S.). Carries a beef curing business at Bagé, Rio Grande do Sul.

Brazilian Extract of Meat and Hide Co., Ltd. Main office, 3 Great Winchester St., London, E. C. Capital authorized, \$577,820; issued, \$105,545. Has a hide and jerked beef factory at Paredao, near Porto Alegre.

By a decree of October 9, 1918, the President of Brazil has given authorization to operate in this country to the Companhia Frigorífico Cruzeiro (Cruzeiro Refrigerated Meat Co.). The head offices of the company will be in Rio de Janeiro.

The company is organized as corporation, with capital stock of 1,600,000 milreis divided into 8,000 shares of two contos each.

According to latest figures, the State of Minas Geraes produced 53,289,200 pounds of butter, 13,227,600 pounds of jerked beef, in 1917.

WATER POWER.

Brazil has not less than 51 great waterfalls capable of producing more than 50,000,000 horsepower. Of these waterfalls 12 are in the Amazon Basin, 6 in the basin of the San Francisco River, 19 on the headwaters of the Jaquitinhonha River between Sierra de Mar and Santa Catharina, and 14 are in the basin of the River Plate. Among these falls the Maribondo may be mentioned with 580,000 horsepower; the Patos with 120,000 horsepower; the Urubupunga with 447,000 horsepower; the Onza with 220,000 horsepower; the Agua Vermelha with 300,000 horsepower; the seven falls of Guayra with 20,000,000 horsepower, and the Iguasú or Santa Maria Falls with 14,000,000 horsepower. The Guayra and Iguasú Falls are in the State of Paraná.

Some of the most important companies using electricity for lighting, power, or street railways are the following:

Alagoana de Trilhas Urbanas, registered in Maceio. The company owns and operates the tramways of Maceio, State of Alagoas.

Bahia Tramway, Light and Power Company. An American company, owning a system of tramways and the gas works of Bahia, a city of 280,000. This company sold its holdings to the city, accepting municipal bonds in payment, which bonds were afterward defaulted as to interest payments.

Brazilian Street Railways Company (Ltd.) A British company, capitalized at £120,000, a subsidiary of the Pernambuco Tramways and Power Company, which operates the tramways, gas works, and electric lighting plant of Pernambuco. The lines

in operation are about seventy-eight kilometers. Capital stock about £1,200,000.

Ceara Tramway, Light and Power Company. It has a concession for seventy-six years from 1911 to operate tramways and electric light and power plants in the towns of Ceara and Fortaleza, State of Ceara. Capital, £400,000.

The City of Santos Improvement Company. A British concern owning the gas, water, electric, and tramway franchises for the city of Santos. The exclusive gas franchise expires in 1920, water in 1930, and electric lighting in 1924. The tramways are thirty-eight miles in length, of which twenty-eight and a half miles are under perpetual franchise, and the remainder under franchises expiring in 1923 and 1938. Authorized capital, £700,000.

Cia. Brasileira de Energia Electrica is a Brazilian company capitalized at thirty million milreis. It owns the hydro-electric works at Alberto Torres, State of Rio Janeiro, on the Piabanba River; the Nictheroy Mage and Petropolis electrical installations; the hydro-electric works at the falls of the River Paraguassu in the State of Bahia, supplying electricity to the towns of Santa Amaro, San Felix, Cachoeira, and Bahia; the hydro-electric works at Itapanhan Falls in the State of Sao Paulo, supplying electricity to Sao Paulo; and the Cia. Telefonica de Bahia. The company controls the Cia. Luiza Circular and the Cia. Tullhos Centrais, tramway companies in Bahia. The concession for Rio Janeiro runs ninety years from 1915; for Nictheroy, sixty years from 1909; for San Goncalo, forty years from 1909; for Petropolis sixty years from 1910; for Sao Paulo twenty years from 1883 and extended thirty years from 1898; Bahia telephones, twenty-five years from 1884 and extended twenty-five years from 1902.

Cia. de Electricidad e Viacao Urbana de Minas Geraes, a Brazilian company capitalized at about two million milreis, shares and bonds of which are largely held in Great Britain. It owns electric tramways and lighting under a concession for fifty-three years. It furnishes the tramway, electric light and power, and telephone service of the city of Belle Horizonte.

Forca a Luz de Cataguazes. A Brazilian company capitalized at one million milreis. It furnishes light and power to Mirahy, Porto San Antonio, Cataguazes, Sao Juao Nepomuenco, Rio Novo, and other towns in the State.

Forca e Luz de Campos. A small Brazilian company in the city of Campos.

Forca e Luz Porto Alegrense, a Brazilian company capitalized at 2,500,000 milreis, operating the electric light and tramway undertakings of Porto Alegre under a forty-year franchise from 1906.

The Manaus Tramways and Light Company, a British concern, capitalized at £300,000, operating the tramways and lighting of the city of Manaus. The company has a sixty-year franchise from 1908.

The Para Electric Railways and Lighting Company, Ltd., a British corporation capitalized at £780,000. It controls a con-

cession for ninety-nine years from 1905 the tramways and electric lighting systems of Pará. It controls the French Cie. d'Enterprises Electrique which operates the gas supply. The tramways have a length of thirty-four and a half miles.

The Paulista de Electricidad, a Brazilian concern capitalized at 1,500,000 milreis. It operates electric light and power works at Lineira, Descalvado Frances, Itapira, and St. Carlos do Pinhal, and at Itajuba. In each case there is a twenty-year contract for street lighting.

FOREIGN TRADE.

The official statistics show that the tonnage and value of Brazil's exports during the last four years have been as follows (values are in American dollars):

Year	Tons	Value
1915	1,807,986	\$260,574,000
1916	1,869,326	284,222,000
1917	2,016,723	298,043,000
1918	1,771,754	284,275,000

Thus, it is shown that in volume the exports during 1918 were nearly a quarter of a million tons less than in the previous year, while the decline in value was nearly \$14,000,000.

Imports, on the other hand, show an increase in value, although in bulk the decline which set in with the outbreak of the war is continued. The tonnage and value of the country's imports during the same years were:

Year	Tons	Value
1915	2,799,168	\$145,749,000
1916	2,640,900	202,689,000
1917	1,986,144	209,484,000
1918	1,736,048	147,375,000

The principal effect of this rise in the value of imports is that it has assisted in reducing the balance of trade in favor of Brazil by more than one-half, with the result that the ability of the country to meet its foreign indebtedness is less than for several years past. An analysis of the figures reveals the fact that while everything that Brazil needs to import is increasing in value at an unprecedented rate, the country's own products are worth little more per unit than in 1915, and are considerably cheaper than in 1913. That values should fall, at a time when the tendency throughout the world is for the cost of all products to increase, is an astonishing condition of affairs that cannot fail to create apprehension in the country. The rise in import unit values and the fall in export unit values are shown in the comparative table published by the Ministry of Finance. The figures are:

Year	AVERAGE VALUES PER TON.	
	Imports	Exports
1913	\$42	\$177
1915	52	144
1916	77	152
1917	105	148
1918	142	160

The cessation of hostilities in Europe and the signing of the armistice, disorganized the import business, and it was only then that one realized the amount of speculation being carried on and the fact that orders placed abroad were far beyond the suddenly restricted market requirements.

Lack of tonnage affected both the delivery of the staple articles of Brazilian and the ascending of new products which had begun to be exported during the previous two or three years.

Government Restrictions on Trade.

The disturbed condition of local markets was due in part to certain Government restrictions. The Food Commission, created in June, 1918, with the intention of lowering prices of necessities, prohibited the exportation of certain products, requisitioned food-stuffs whenever there was an insufficiency in the markets, and fixed prices.

Coffee continued to be the principal article of export, in spite of a great decline in tonnage shipped during 1918. Coffee exports since 1913 have been: In 1913, 13,268,000 sacks; in 1915, 17,061,000 sacks; in 1916, 13,039,000 sacks; in 1917, 10,606,000 sacks; in 1918, 7,433,000.

The reduced exports during 1918 are attributable largely to war conditions, the chief reasons being lack of bottoms and the import restrictions imposed by the Allied countries. The very severe frosts which destroyed millions of coffee trees in June also sent prices soaring and greatly restricted the movement of this staple. Notwithstanding this reduction, 34 per cent. of the total exports from Brazil in 1918 consisted of coffee.

Brazil, being an undeveloped country, greatly needs a surplus of exportation over importation to make payments on its foreign obligations. The favorable trade balance of 1915, 1916, and 1917 contributed to the establishment of an equilibrium in the financial conditions of the country.

Since 1914 the United States has had a larger share of the trade of Brazil than any other country, although the difference was not so marked during 1918 as during 1917. Imports from Japan show a very healthy increase, and in 1919 were greater than in any previous year. The Japanese appear to be studying the market in a most careful manner, and it seems are able to supply certain small articles of merchandise at an exceedingly low figure which were formerly received from Germany. The increase in value of goods from Argentina and Uruguay during the war period in value of goods is also of interest. In 1918 imports from Argentina were valued at \$46,974,750, compared with \$27,326,441 the previous year. The value of goods from Uruguay in 1918 was \$10,316,650. and in 1917 only \$4,048,285.

The share of each country in the export trade of Brazil for 1918:

United States	\$98,474,000	Italy	30,249,500
United Kingdom	28,700,500	Sweden	1,386,250
France	25,604,000	Spain	6,355,250
Austria-Hungary	609,000	Portugal	2,600,500
Argentina	43,188,250	All other countries	16,041,750
Belgium	1,440,000		
Uruguay	29,626,000	Total	284,275,000

The share of each country in the import trade of Brazil during 1918 was (values are in American dollars):

United States	\$88,932,750	Switzerland	1906,250
United Kingdom	50,469,500	India	3,087,250
France	11,837,000	Newfoundland	5,927,250
Argentina	46,974,750	Spain	4,371,500
Portugal	9,490,750	Norway	1,060,777
Italy	5,263,500	Sweden	2,349,500
Uruguay	10,316,650		

Exports by quantities in 1918 were as follows (in metric tons):

Lard, 13,270; Preserved meat, 17,223; Refrigerated meat, 60,509; Hides, 45,584; Wool, 1,329; Skins, 2,215; Jerked beef, 4,809; Manganeese, 393, 288; Cotton, 2,594; Rice, 27,916; Sugar, 115,634; Potatoes, 5,209; Rubber, 22,662; Cocoa, 41,865; Coffee, 7,433,000 bags; Carnauba wax, 4,215; Mandioca flour, 65,322; Beans, 70,914; Table fruits, 24,566; Fruits, oil-bearing, 19,310; Tobacco, 29,755; Herva matte, 72,781; Woods, 179,799; Corn, 14,175; Oils, 6,611.

The exports of Brazil during the first quarter of 1919 consisted of 550,741 tons of merchandise, valued at 563,036 contos, as compared with 474,057 tons, valued at 236,281 contos, during the same period of 1918. Coffee was a large factor in these exports, inasmuch as from January to March 1919 the shipments of coffee aggregated 4,088,000 sacks, as compared with 1,775,000 sacks during the same months of 1918, 3,047,000 sacks in the same period of 1917, and 2,774,000 sacks in the corresponding period of 1913.

TRADE WITH THE UNITED STATES.

The United States received the bulk of exports from Brazil, although the value of shipments in 1918, \$98,474,000, was less than that of any other year of the five-year period 1913-1918. Argentina ranked second among the countries of destination, with exports amounting in value to \$43,188,250, the largest amount ever purchased from Brazil by Argentina. Italy, with shipments valued at \$30,249,500 was third, and Uruguay fourth. Exports to the latter country were worth \$29,626,00 in 1918, an increase of more than 100 per cent. over those in 1917.

BRAZILIAN GOODS SENT TO THE UNITED STATES.

The imports of Brazilian goods into the United States in 1919 were as follows:

Art works, \$205,414.	Cotton, manufactured, \$111,060.
Brass, fit only for manufacture, 21,120.	Dyewoods, in a crude state, \$30,976.
Breadstuffs, \$146,560.	Edible substances, \$64.
Chemicals, drugs, dyes and medicines, \$538,782.	Fertilizers, \$40,574.
Cocoa, or cacao, crude, \$8,383,-383.	Fibers, vegetable, and textile grasses, unmanufactured, \$9,-993.
Coffee, \$60,890,926.	Fruits and nuts, \$1,475,421.
Copper, and manufactures of, \$57,256.	Furs, and manufactures of, \$24,-204.

Glue and glue size, \$10,735.	Mica, and manufactures of, \$136,-
Hair, and manufactures of, un-	646.
manufactured, \$2,008.	Monazite sand and thorite, \$44,-
Hides and skins (except fur	962.
skins), raw or uncured, \$8,-	Oils, vegetable, \$496,208.
527,398.	Paper and manufactures of, \$2,-
Household and personal effects,	306.
and wearing apparel, etc.,	Plants, trees, shrubs and vines,
\$4,793.	\$6,488.
India rubber, etc., and sub-	Platinum, \$2,312.
stitutes for, unmanufactured,	Plumbago or graphite, \$9,427.
\$14,329,907.	Precious stones, \$1,241,055.
Iron, chromate of, \$511,055.	Seeds, \$1,398,060.
Iron and steel, and manufactures	Starch, \$15,496.
of, \$6,674.	Sugar, cane, \$159,033.
Ivory, vegetable, \$17,639.	Tanning material, \$14,580.
Manganese, oxide of, and ore,	Tobacco, and manufactures of,
\$9,090,380.	\$1,099,974.
Meat and dairy products, \$926,-	Vegetables, \$1,147,943.
182.	Wax, \$2,168,518.
Metals, metal compositions, and	Waste, \$4,013.
manufactures of, \$330.	Wool, unmanufactured, \$260.
Minerals, crude, \$14,296.	Wood, \$179,880.

AMERICAN GOODS IMPORTED IN BRAZIL.

In 1918, Brazil imported American goods as follows:

Agricultural implements, and	Furniture of metal, \$38,252
parts of, \$242,902.	Furs and fur skins, \$50,607.
Aluminum, and manufactures of,	German silver, \$5,660.
61,022.	Glass and glassware, \$433,797.
Animals, \$24,507.	Glucose, \$48,170.
Asbestos, manufactures of, \$66,-	Glue, \$15,655.
809.	Gold and silver, manufactures
Asphaltum, \$27,730.	of, \$10,102.
Athletic and sporting goods,	Grease, lubricating, \$90,204.
\$15,471.	Jewelry, \$57,828.
Babbit metal, \$20,094.	Hair, animal, \$17,378.
Blacking, \$39,174.	Hay, \$29,918.
Breadstuffs, \$1,319,868.	Hops, \$109,483.
Bronze, manufactures of, \$43,-	Household and personal effects,
842.	\$11,730.
Brushes, \$31,242.	India rubber, manufactures of,
Buttons, and parts of, \$109,173.	\$967,884.
Cars, automobiles, and other	Ind, \$62,929.
vehicles, \$1,610,070.	Instruments and apparatus for
Celluloid, and manufactures of,	scientific purposes, \$98,044.
\$145,050.	Iron and steel, \$8,069,054.
Chemicals, drugs, dyes, and	Hardware, \$3,056,669.
medicines, \$5,595,261.	Lamps, except electric, \$139,778.
Clocks and watches, \$104,208.	Lead, manufactures of, \$498,421.
Coal and coke, \$3,615,816.	Leather, \$3,128,737.
Confectionery, \$3,445.	Lime, \$34,030.
Copper, \$844,125.	Malt, \$346,394.
Cork, manufactures of, \$20,791.	Meat and dairy products, \$531,-
Cotton, \$3,668,227.	431.
Dental goods, \$134,168.	Metal polish, \$5,701.
Earthen, stone, and china ware,	Metals, \$76,769.
\$68,274.	Motor Boats, \$4,575.
Electrical machinery, appliances,	Mucilage and paste, \$7,772.
and instruments, \$3,802,810.	Musical instruments, \$103,103.
Fertilizers, \$3,056.	Nickel, \$21,066.
Fibers, vegetable, manufactures	Notions, \$131,732.
of, \$171,369.	Oakum, \$14,819.
Fish, \$252,135.	Oilcloth and linoleum, \$54,492.
Flavoring extracts and fruit	Oils, \$6,262,385.
juices, \$14,277.	Paper, \$3,138,012.
Fruits and nuts, \$283,742.	

Paraffin and paraffin wax, \$115,- 529.	Spirits, wines, malt liquors, and other beverages, \$19,836.
Pencils and pencil leads, \$149,- 362.	Sponges, \$3,546.
Penholders, \$9,819.	Starch, \$41,541.
Pens, fountain, \$4,960.	Stone, and manufactures of, \$30,872.
Pens, metallic (except gold), \$19,169.	Straw and palm leaf, manufac- tures of, \$6,688.
Perfumery, \$216,411.	Sugar and molasses, \$6,441.
Phonographs, graphophones, gra- mophones, and records, \$460,- 023.	Surgical appliances (not includ- ing instruments), \$115,072.
Plaster, \$8,055.	Suspenders and garters, \$50,353.
Plated ware, \$295,168.	Tin in pigs, bars, etc., \$9,901.
Plumbago or graphite, and man- ufactures of, \$26,511.	Tobacco, \$145,278.
Refrigerators, \$3,923.	Toys, \$92,468.
Roofing felt and similar mate- rials, \$34,173.	Trunks, valises, and traveling bags, \$7,320.
Salt, \$304.	Type, \$1,638.
Seeds, \$26,298.	Typewriter ribbons, \$12,530.
Shoe findings, \$151,616.	Umbrellas and parasols, \$50,310.
Silk, manufactures of, \$296,148.	Vegetables, \$91,233.
Soap, \$63,041.	Vulcanized fiber, and manufac- tures of, \$15,396.
Spices, \$36,727.	Wood, \$524,467.
	Wool, manufactures of, \$815,192.
	Zinc, \$133,273.

The Government of Italy contracted for the transportation from Brazil to Italy during 1919 of 60,000 tons of Brazilian products representing a value, including freights, of \$25,000,000.

Imports of boots and shoes into Brazil have decreased, according to Brazilian figures, from \$532,000 in 1912 to \$54,000 in 1917, while American figures show that shipments from the United States to that country have fallen off from \$534,000 in 1913 to \$57,000 in 1918.

Brazil offers an excellent market for imported upper leathers. In 1917 the country imported nearly \$4,000,000 worth of tanned and finished leathers, not including sole leather.

Many supplies entering into the Brazilian shoe-manufacturing industry are made locally, and the war stimulated domestic production in these lines. Many supplies, however, are principally imported from the United States and other countries. Among such articles are box-toe gums, brushes, buckles, nails, thread, brass and steel wire, welting, leather board, shanks, waxes, stains, inks, and blakings, hooks and eyelets, laces, sandpaper and emery cloth.

American-made dyes have been introduced in Brazil, especially in the State of Bahia. Although small quantities came from England, the United States is the principal source of supply. The dyes manufactured in the United States are giving satisfaction. Some vegetable dyes are now being manufactured in Brazil, but they have not proved very satisfactory.

Naval stores are imported in considerable quantities at Bahia and are supplied exclusively by the United States. Resin, which leads in this category with an annual total of about \$100,000, is shipped in wooden barrels containing 500 pounds each. Only the poorer grades, G to K, are wanted. The principal use of resin here is in the manufacture of soap.

Caustic soda is the only one of the commercial sodium products imported into Brazil in sufficient quantities to be listed

separately in the official statistics. The imports of caustic are over seven million kilos annually.

The imports of coal into Brazil during May amounted to 92,963 metric tons, 24,657 tons of which were furnished by the United Kingdom and 68,306 tons by the United States. During the corresponding month of 1918 Great Britain supplied 11,639 tons and the United States 23,800 tons of the 35,439 tons imported.

The market for small plows, disc harrows, cultivators, and hoes in Brazil appears to be very promising specially in Pernambuco. There is an increase in the cultivation of new lands. There are two district agricultural areas: The sugar area, extending back from the coast and along the railroads; and the cotton area, covering the high interior and more remote from the railroads.

The only implement used in the cultivation of cotton, is a special type of hoe. Formerly all these hoes came from Europe, and there has been difficulty in obtaining in the United States the type wanted. What is used is a good steel hoe, weighing 2, 2½, 3, or 3½ pounds. The 3-pound hoe is most in demand. The 3½-pound hoe is also extensively used. The bottom is polished, and the upper portion painted.

There is also a demand for the walking plows; and, among sugar growers, for harrows and cultivators.

There is a steady demand in Porto Alegre for American sheetings, drills, and twills. The best method of packing for this market is to use bales bound with iron bands to prevent theft. The piece goods are wrapped in paper, the entire bale then covered with oiled, water-proof fabric, and securely covered with strong jute burlap.

COMMERCIAL ARBITRATION.

The American Chamber of Commerce of Brazil recently proposed to the Commercial Association of Rio de Janeiro that an arbitration agreement be effected between the United States Chamber of Commerce and the Commercial Association. A joint meeting was held on January 8, 1919, in the offices of the Commercial Association, at which the proposed agreement was advocated by the American consul and the secretary of the American Chamber of Commerce. The draft of the agreement offered by the American Chamber is based on the arbitration arrangement consummated in 1916 between the Buenos Aires Bolsa de Comercio and the United States Chamber of Commerce.

The following is a brief résumé of the work accomplished by the chamber during 1918 and of its program for 1919:

Considerable attention was given to customs house matters and tariff questions in Brazil. It is believed that owing to the great increase in American trade with this country it will soon be necessary to make a serious study of all matters having to do with clearance of merchandise, customs duties, and all matters having to do with tariff.

The chamber has cooperated with the British Chamber of Commerce for Brazil to a considerable extent.

Special bulletins have been issued from time to time for the information of the members and others interested as to important Government regulations and like items of interest. The chamber has published in the past a trade review known as The Quarterly, and expects to continue this journal.

Branch chambers are being established in various places in Brazil where such an organization appears to be warranted.

A matter which has been receiving considerable attention is the encouragement of show and store rooms where salesmen, for a moderate fee, may display their samples, and possibly arrange for a permanent exposition of American goods.

With a view of preventing a large number of cancellations of contracts after the armistice was signed the chamber initiated a plan of arbitration with the Associacao Commercial of Rio de Janeiro.

An American Chamber of Commerce was recently formed in Sao Paulo, Brazil. The aims of the chamber are to further the development of commerce between the United States and Brazil; to collect information and to examine questions pertaining to their mutual commercial and industrial relations, and especially to promote American interests in Brazil as well as Brazilian interests in the United States; and to maintain affiliation with the American Chamber of Commerce for Brazil, located at Rio de Janeiro, Brazil. Mr. W. G. Stevens was elected president of the new organization, and Mr. S. W. Harris, secretary.

REGULATIONS FOR THE EXPORTATION OF BRAZILIAN FOOD STUFFS.

In furtherance of the law requiring the inspection and certification of foodstuffs exported from Brazil, the Brazilian Minister of Finance issued instructions on August 8, 1918, regarding the procedure to be followed, in shipments of coffee to New York. For shipments made through the Federal Capital, certificates are to be issued by the Brokers' Association for grain and other products easily inspected, and by the Bureau of Chemistry of the Ministry of Agriculture for other products. In other ports the examination is to be conducted by the collectors of customs with the assistance of the official chemical laboratories in the various States where such exist. Chilled beef is excepted from the new regulations and will continue to be examined according to the present regulations.

Examination is obligatory regardless of the purpose for which the products are exported, and all packages must be prominently marked with the word "Brazil" and the place of production, weight, and destination, in addition to any other marks the exporter may consider necessary. Products for industrial use must also bear the words "for industrial purposes" in ink of a different color. Raw and brown sugar and molasses, when not sold on the basis of polarization, are regarded as for industrial use. The Brokers' Association and other officials inspecting ex-

perts are directed to classify goods as a 'superior', 'good,' and 'common,' and the decisions will be compared in order to arrive at a standard classification.

The following charges are authorized for the examination of goods and the issuance of certificates: Classification of any kind of goods when packed in bags, 0.050 milreis; classification of goods otherwise packed, 0.100 milreis; stamp tax, 5 milreis; and stamp tax on copies of certificates, 3 milreis.

CUSTOM REGULATIONS FOR IMPORTS.

Consular invoices must be made out in quadruplicate and must bear the same marks and numbers as those appearing on the packages of goods. When there are a few packages in one shipment, destined to the same person or firm, they should all bear the same mark and should be numbered consecutively.

All consular invoices must be certified by the Brazilian consul at the port of embarkation; and when the shipment is made in a British vessel, by the British consul at the port of embarkation.

The Federal Budget Law of December 31, 1918, made radical changes in the regulations regarding Brazilian consular invoices. This law was expected to go into effect on Nov. 1, 1919, but the date was postponed pending congressional action. By the time the Year Book went to press, a part of the regulations had been abandoned, and the other part, the substance of which is given below, was expected to come into effect.

The consular invoice must contain the name of the country where the merchandise to be exported was purchased, besides the country of origin. The declaration of merchandise required on the consular invoice must contain the proper name of each article of merchandise and of the material composing same; the different materials composing the article and its decorations must be specified. General terms cannot be used, such as "cotton goods", "chemical products" or "food stuffs." Invoice must show gross weight of the package, gross weight of the merchandise with its immediate containers or wrappings and the real net weight of the merchandise with any wrappings. It is forbidden to combine the weight and value of merchandise of different kinds or qualities. Whenever objects can be counted or measured, the invoice should mention the number and dimension in linear, square or cubic meters and the respective value. Textiles must show the weight per square meter.

Below is a model for Brazilian consular invoice:

Marks and numbers.

Packages.—Number. Kind.

Complete designation of each kind of merchandise with its trade, name, use the material of which it is made.

Weight in kilograms.—Gross of packages. Gross of merchandise. Net of merchandise.

Other tariff specifications.

Value of each article of merchandise in sterling, including freight and expenses.

Country of origin.

Country of purchase.

The specification of the merchandise as called for in the models of the consular invoices must be made by the proper denomination of each item, together with the respective materials entering into its composition or preparation, stating whether simply constituted of the original raw material or of a composite nature, or finished or prepared in any way; details must be given of the different materials forming integral parts of any merchandise, the composition or preparation of which has to be declared as above required. General designation, such as cotton fabrics or other manufactures, chemical or pharmaceutical products, or any other denominations which are based on generalities must be excluded.

Weights must conform absolutely to the specification required by the model of the consular invoice: Gross weight of package, gross of contents of package inclusive of containers, wrappers, etc., and net of goods; that is, without containers, wrappers, etc.

It is not permissible to declare in one single heading weight and value of merchandise of different kinds or qualities.

Whenever it is possible to count or to measure the articles the invoice must declare the number of such articles and their dimensions in linear, square, or cubic meters, as well as the respective value. Textiles must be declared with the weight per square meter.

In case the customhouses discover any divergence between the consular invoices and the merchandise presented for clearance, the customhouses concerned will forthwith communicate to all other custom departments, as well as to the consul who may have legalized the consular invoice, the names of the exporter and importer, such communication serving as a warning to these departments and to the consul to exercise vigilance over the documents and merchandise which may be shipped by or consigned to the same parties.

In case of a breach of any of the present regulations, the importer will incur in a fine of 10 per cent, calculated upon the official value of the merchandise, independently of any other penalty which the violation may cause him to incur.

One-half of this fine will be adjudicated to the customhouse functionary who discovered the infraction of the regulations and made the necessary communication.

COMMERCIAL SAMPLES.

Since samples that are brought into Brazil by commercial travelers are exempt from actual Custom House duties, the following regulations should be observed to take advantage of this exemption:

Together with the samples there should be an invoice certified by the Brazilian Consul at the port of origin, detailing the various articles, giving weights and measures converted into the metric system. A customs house broker must file with the Collector of the Port a petition to have samples passed, in order to clear samples from the Custom House. This petition must be accompanied by the Brazilian consul's certificate obtained at point of origin. The amount of duties must be deposited with

the Custom House authorities or a satisfactory bond or guaranty. The funds deposited will be released when the goods are exported from the country. When bond for such shipments is given by local forwarding companies in behalf of a salesman, the former must have a letter from a recognized forwarding company in the United States, guaranteeing the bond. Therefore, it is necessary for all salesmen who intend sending samples to Brazil to obtain a letter from a well-known express company in the United States instructing their correspondents in Brazil to furnish bond if necessary. Samples must be re-exported within 60 days or full amount of duty will be charged. An extension of time may be obtained by special concession of the Collector of the Port. When making the ship's baggage manifest, care should be taken to designate those articles which are going to be re-exported from the Custom House itself, as "In transit for——."

Besides the duties, there are various extra charges for clerical services, warehousing, port tax, etc., which are not refunded. These charges amount to 10.15 per cent. of the official value of the merchandise.

Advertising Matter.

Salesmen planning to enter advertising matter in Brazil should have same printed in black only. The duty charged on paper printed in two colors approximates 70 cents per pound, and for paper printed on two or more colors it is about \$1.25 per pound.

Catalogues should not be sent to Brazil in English or Spanish since the national language is Portuguese.

Drafts.

Drafts should be made out very correctly as regards amount and other details, when drafts are sent to the bank they should be properly endorsed.

The bank should always be fully informed regarding representative of the drawer in Rio de Janeiro.

Drafts should be drawn for an amount exceeding the cost of the merchandise so that incidental charges such as stamps, bank's collection fee, etc., may be covered, unless the drawer intends to pay these charges.

The Brazilian law states that the drawee cannot be forced to pay anything in excess of the face amount of the draft, therefore, if the draft is drawn merely to cover cost of goods and the bank is asked to collect same and any charges from the drawee, the drawee may refuse to pay and is upheld by the law. Another item which the drawee is often asked to pay when it is not included in the face of the draft, is interest from the date of shipment in New York to date of reimbursement there. The drawee cannot be forced to pay this either, since the law also covers this point.

The United States exporter may specify on his draft "discount at the rate of 6 per cent. per annum for cash." The importer may wait a long period and then, before maturity, make pay-

ment and demand "cash discount," as according to his interpretation he is paying "cash." To avoid this confusion a statement to this effect should be made: "For anticipated payment discount can be granted at the rate of 6 per cent. per annum for the period still to run."

Documents.

Merchandise should be accompanied by documents which may be sent on a faster steamer so that they may arrive in advance of the merchandise. The best method is to send the documents together with the merchandise. Should the goods arrive without the documents the importer is obliged to pay a term "termo de responsabilidade" which is good up to 90 days. Should these documents not be presented at the end of the term a fine of double the duties is imposed upon the importer.

The best and only way that the bill-of-lading should be made to read is "To order" or "To order of bank."

Imports require insurance.

If merchandise is insured under a blanket policy, an insurance certificate should accompany the other documents. Should anything happen to the goods on sea before they arrive and this is known to the importer, he, in most cases, will refuse to accept the draft until he is sure that the merchandise is covered by insurance. Importers generally have their merchandise insured for 10 per cent. more than their value.

Fine goods, such as silks and small goods of considerable value, are usually insured against theft.

Shipments From Inland Ports.

Importers open commercial credits only when payment is made by a bank in New York against presentation of ocean shipping documents. Usually they refuse to open a commercial credit payable against railway bill of lading.

Shippers at interior points of United States should arrange with a Custom House broker in New York to handle shipments.

Importers have often been asked to make such arrangements when they have no facilities for doing so.

Business Methods.

Care should be taken to give full details and description regarding weight, size, etc., when sales are being negotiated by correspondence. Difficulties arise often from lack of detailed description of this nature.

Some large firms purchase in the United States in current account with six months in which to make payment. In such a case interest is charged at the rate of 6 per cent. per annum. Houses in good standing do their purchasing in Europe under current account. Several houses refuse to accept bills.

Packing.

Careful attention should be given to instructions received from Brazilian importers or agents in Rio de Janeiro regarding packing of merchandise.

Merchandise of the same class should be packed together and not distributed through the series of packages.

Where goods are forwarded to a distribution agent, goods for different consignees should not be placed in the same case, unless specially requested, since that will entail payment of duty upon all goods before clearance can be effected.

Should shipment consist of various separate parcels goods may be cleared in small lots provided individual packages are not broken.

While there is certain to be a reaction in the import trade of Brazil, caused by European countries attempting to regain the position they held before the war, the outlook of the United States retaining its place as the principal source of supply is quite optimistic.

The following are a few of the requirements for the exporting of merchandise to Brazil:

The inauguration of better packing methods in general, which may be accomplished by the training of expert packers and the inspection by the exporting house at the port of departure of shipments which have been prepared at the factory.

The filling of orders exactly in accordance with specifications and if this is impossible, to ascertain whether the customer cares to accept an article "slightly" different before it is packed.

Arrangements for the proper credit terms. There are some buyers who are willing to pay cash, but the majority prefer credits of at least 60 to 90 days. It is necessary to take the foreign customer's point of view into consideration.

Many of the larger Brazilian firms have their buying agents in Europe. With the first-rate houses open credit at 90 days' sight is asked for and granted. In outports 90 to 120 days' credit is not uncommon; and for heavy machinery six to nine months. Banking rates rule from 9 to 12 per cent. It is usual to stipulate for payment in pounds sterling. Collection rates are, for Rio de Janeiro, Santos, and Sao Paulo, three-eighths of 1 per cent; for Pernambuco and Bahia one-half of 1 per cent; and for other outports about five-eighths of 1 per cent; in each case plus postage.

HOW IMPORTS ARE MANAGED.

The products of Brazil exported to the United States, being of a nature to be shipped in large quantities and involving important sums of money in each transaction, can not be shipped on consignment or in open account, since this would require the investment of considerable capital until the goods are sold and the funds remitted. It is consequently the custom of the shipper to draw for the value of the shipments or for an agreed percentage of the estimated value thereof. These bills of exchange, accompanied by the negotiable shipping documents, are

sold to or discounted by the local branches of international banks. These documents are forwarded to the American correspondents of the bank, and are surrendered to the American importer upon payment of the corresponding drafts at their maturity or upon the furnishing of satisfactory security for the payment of the drafts.

The local seller draws ordinarily under a credit opened by the American importer, although in rare cases where the local standing of the seller is very high and that of the drawee equally good the local banks may buy or discount the seller's direct draft on the buyer.

The Banker's commission on letters of credit is from one-eighth to one-half per cent., and interest is charged at 5 per cent. per annum, or at the Bank of England's rate if above 5 per cent. For anticipated payment interest is allowed at a rate of 1 per cent. below the Bank of England's rate.

The local exporter has his regular correspondents in the United States from whom he receives or to whom he cables firm offers for products. The cable acceptance of these offers constitutes the contract. The credit is arranged by the correspondent, and a copy of the same is forwarded to the local exporter. His drafts are made at the time of shipment in accordance with the terms of the credit and sold to a local bank, which indorses on the credit the amount of the draft.

The common usance of bills covering shipments of merchandise from Brazil is 90 days' sight when drawn on London or a European financial center. When drawn on New York they are usually at sight. Recently, however, drafts on New York at 90 days' sight have been used to some extent.

To Prevent Cancellations.

Port and customhouses in Brazilian ports are congested with merchandise, much of which has been rejected by consignees in Brazil, some on good grounds, others availing themselves of certain technicalities, but largely due to fear of falling prices and impossibility of paying immediately value and duties on accumulated shipments far in excess of ordinary requirements. Many cancellations and rejections could be avoided if extension of time on drafts can be arranged. Representatives of some American firms cannot protect their principal's interests by disposing of this rejected merchandise advantageously, because they do not have sufficient authority. Failure to forward documents on same steamer with merchandise causes loss, delay, and difficulty in disposing of these shipments. Banks can extend time on drafts already discounted by exporters, who are then in a position to extend same accommodation to importers in Brazil, who although in good financial condition cannot accept or pay at once for merchandise shipped on accumulated orders amounting to much more than ordinary requirements.

CUSTOM TARIFF.

The subject of tariff revision, which has been discussed in Brazil for some time was taken up again in 1919. Unlike the

former drafts of tariff bills, which were usually prepared by parliamentary commissions, the present draft is the work of two tariff experts, Dr. Paulo Silva, the director of the Rio de Janeiro customhouse, and Dr. Jansen Muller, an inspector at the same customhouse and the author of a report on the Brazilian tariff, published in 1913.

The revision is certain to come, and the new tariff will soon be published. In the meantime, it is useless to give the tariff under revision.

Under a decree of December 31, 1918, the President reduced duties on imports of United States merchandise as follows: Wheat flour, 30 per cent.; and 20 per cent. on condensed milk; rubber goods, watches, colors included under Article 173 of the tariff (with the exception of writing ink and varnishes); typewriters, refrigerators, pianos, scales, wind mills, cement, dried fruits, and school and office furniture.

In January, 1919, the Congress of Brazil adopted an executive decree authorizing the continuance during 1919 of the preferential tariff treatment of certain American products. The articles on which the reduction had been granted were specified in a separate decree. The list was substantially the same as that of 1918—namely: a 30 per cent. reduction on imports of flour, and 20 per cent. on the duties of the following goods when produced in the United States: Condensed milk, manufactures of rubber, paints and colors, except writing inks, varnishes, typewriters, refrigerators, pianos, scales, wind mills, cement, corsets, dried fruits, school furniture, writing desks, etc.

SHIPPING.

With the outbreak of the European war maritime traffic was immediately modified, due in part to the urgent necessities of war, the requisitioning of the entire fleet of certain countries, especially the belligerents, and the great reductions in the shipping of the neutrals.

Of the companies engaged in Brazilian trade the Royal Mail employed the greatest number of steamers in its lines to South America. Its number was increased after the incorporation with the Pacific Line, the itinerary of which went as far as Iquique, Peru, returning by the Straits of Magellan with calls at the ports of Brazil. As soon as war broke out the English Government requisitioned a large part of these ships, there remaining only the "A" and "O" series in service. Afterwards the "O" series was suspended, leaving the "A" group, which soon after were substituted by the "D" series boats, five steamers of the South American line. Of these one was torpedoed and the remaining four had to take care of the navigation for 3½ years.

The management of the Royal Mail did not expect quick resumption of traffic in view of the necessities of the Government in transporting troops and that of its allies to distant points.

The Lloyd Nacional was one company which started well equipped at the beginning of the war and during that period

sustained on the Brazil-European line 13 steamers. Two more vessels have been added recently, one of which, the Marne, has already started its regular trips. The Plave will leave shortly, direct for Italy, and the line to Trieste will have different steamers. This company has therefore already increased the number of its steamers since the armistice. There are still four more on the shipways: the Parangua, Parana, Antonia, and a fourth which has not yet been named. The Antonio is of 4,000 tons gross register and the others 2,000 tons and upward.

The Italian companies will not be able to regulate their navigation for South America at once, nor will the Holland line, which had ceded a large number of its ships to the allies.

The Commercio e Navegacao line before the war did not have any steamers in European service, occupying itself solely with Brazilian coast trade. However, during the war it employed 16 steamers to Europe. Of these 4 were torpedoed. So long as the foreign navigation companies are not reestablished this line will continue in the trans-Atlantic trade, which service it will have to give up later because of the impossibility of competing with English, French, and Italian lines, as its steamers are not accepted by the insurance companies.

The Lloyd Brasileiro in the last month of the war had 11 steamers for North America, as follows: Uberba, Pacone Cazias, Goyaz, Avare, Curvello, Benevento, Maranguape, Cuyuba, Sergipe, and the Guajara. No ships were employed in the European line, and on the River Plate only four. Of these the following went to the European line as soon as the armistice was signed: Avare, Curvello, Benevento, Maranguape, Therezina, and Tocantins. The Tapajos and the Purus, which were used in the wheat-carrying trade; were transferred to the North American line. The Cuyuba, which prior to the armistice was on the North American line, was transferred to the north and south trade. During the years of the war the movement of the Lloyd Brasileiro was as follows: For North America, 1 steamer a month; for Argentina, 3; none for Europe. After the armistice five steamers were taken from the Rio de Janeiro and the River Plate service and transferred to North American and European service.

In 1911 only three American vessels touched at Rio de Janeiro, as compared with 287 ships of American registry which entered Rio in 1858. From 1860 on there was steady decline. Since 1911, there was a slight though steady increase. During the two-year period of 1912-1913 only sixteen American vessels entered Rio harbor. In 1913 the first vessel of the United States and Brazil Steamship Line entered Rio. In 1914 twenty-six American vessels entered the port, but during 1915, for the first time in many years, the American ship began to come into its own again, when 103 American vessels made Rio.

The number of American vessels to make Rio in 1916 rose to 130. America's entry in the war naturally took most of the vessels out of the American trade, and in 1917, 117 American vessels made entry, this declining to seventy-one ship in 1918.

The registered tonnage of the vessels which entered Rio in 1918 totalled 2,737,281 tons. The ships, by nationalities, were: English, 448; French, 93; Italian, 64; Dutch, 6; Argentine, 15; Norwegian, 157; Spanish, 11; Swedish, 24; Uruguayan, 1; Belgian, 1; Danish, 24; Russian, 2; United States, 64; Greek, 11; Japanese, 16; Chilean, 1; Portuguese, 6; Brazilian, 184. A total of 1,128 ships.

The number of American ships arriving at Rio de Janeiro during 1919 show an exceedingly healthy increase over former years. From May 1 to May 23, 19 vessels of American registry entered, and since January 1, 74 entered, 63 of which came direct from the United States. 48 were steamships, 7 motor vessels, 18 schooners, and 1 barkentine.

These figures compare favorably with 1918, when only 71 American vessels arrived here during the entire year, 17 of which were steam vessels and 46 sailing vessels, the others being auxiliary schooners and motor ships.

The steamship, passenger, and immigration statistics of the port of Rio de Janeiro during the 10-year period from 1908 to 1917 were as follows: Entrance of steamers from abroad, 5,752, of which 1,750 were English, 1,153 French, 1,128 German, 830 Italian, 308 Dutch, 236 Austro-Hungarian, 236 Spanish, 156 Brazilian, 6 Japanese, 6 Norwegian, 6 Argentinian, 5 North American, and 1 Portuguese.

A plan for the reorganization of the Lloyd Brasileiro was presented to the Brazilian Senate on September 2, 1919. This proposal would authorize the Government to form a stock company under the name of Companhia Lloyd Brasileiro, the Government to turn over all of the property to the old Lloyd Brasileiro which it took over, the foreign steamers which it appropriated during the war, and the war transports which are not permanently in service; this property to be appraised in a manner prescribed by law. The Government would maintain under conditions of inalienability a number of shares equal to half of the capital of the new company, and sell the others in the open market in Rio de Janeiro, New York, London, Paris, and Berlin with the privilege, however, of rejecting the best offers and opening a new call for tenders. One-third of the proceeds of the sale of stock will go to increase the capital of the Bank of Brazil and two-thirds to meet the deficit in the budget of 1920.

The proposed reorganization would vest control of the company irrevocably in two directors; one, the director-president, to be chosen by the Government, the other, or director-manager, to be elected by the holders of non-Government stock. The directors would be elected for six years, subject to recall.

The plan as published in the Official Journal gives the new company exemption for 50 years from payment of stamp taxes on contracts, receipts, and bills of lading; from tax on stock dividends; and from any and all Federal charges on the entrance, stay, and departure of ships from national ports. For 50 years after incorporation, also, the new company would be granted a fixed tariff rate of 5 per cent. ad valorem on articles imported for its own use, and preference in whatever contracts the Gov-

ernment may negotiate regarding navigation; that is to say, the company would be allowed to accept any contract on the basis of the best proposal presented, should it desire to do so.

The steamers of the Lloyd Brasileiro Steamship Line were distributed between Europe and the United States in February, 1919, as follows: To European ports: Avare, Curvello, Caxias, and Campos. To the United States: Pocone, Benevento, Purus, and Cuyaba, these ships to make stops at Bahia, Pernambuco, Pará, and Barbados.

The President approved the new By-Laws of the Brazilian Lloyd Steamship Co., which has in operation 66 steamers, representing 167,874 gross and 97,327 net tons. Twelve of these vessels, having 84,293 gross and 47,440 net tons, were formerly German ships. Four vessels, representing 8,421 gross and 5,527 net tons, are being repaired. The steamers of this company made 481 round trip voyages in 1918, representing 1,961,698 miles, carried 87,030 passengers, 949,631 metric tons of freight, and 1,284 head of stock without any accident whatsoever. The net earnings of the company in 1918 were 7,731 contos.

The State of Bahia, Brazil, is undertaking a new coastwise steamship service for its southern ports. The itinerary of the new line will include the towns of Porto Seguro, Prado, Alcobaca, Ponta da Areia, Caravellas, Vicosia, and Sao Jose de Porto Alegre, and later Itauna and Barra e Cidade de Sao Matheus.

The legislature of the State of Bahia has authorized the complete reorganization of the State-owned steamship lines, the Navegacao Bahiana and the Linea do Rio Sao Francisco. Much new equipment will be bought and new vessels added to the fleet.

The Johnson Line, with home office in Stockholm, Sweden, has inaugurated a steamship line between Sweden and the port of Rio Grande do Sul, with intermediate stops at Rio de Janeiro and Santos. The steamers for this service are from 10,000 to 12,000 tons' displacement.

The Companhia Transoceanica Luso-Brazileira, was organized in Lisbon in 1919, with a capital of approximately \$15,000,000, subscribed by Brazilian capitalists. The purpose of this organization is to provide rapid and regular mail, cargo, and passenger services, the latter principally for third-class passengers.

The ships of the company are to ply exclusively between Portugal and Brazilian ports; they will touch, however, at the Portuguese possessions in Africa.

By Decree of April 9, 1919, the President authorized the requisitioning of all materials belonging to the Companhia Navegacao Fluvial a vapor Itajahy-Blumenau, a German concern, and by the same decree all the property of that company was incorporated with the Estrada de Ferro Santa Catharina, which is under the administration and control of the Federal Government.

The Swift Co. of Rio Grande has made a contract with the "Nelson Line" of London by which the latter agrees to reserve six vessels of its fleet for the transportation of frozen meats from the Brazilian port to various ports of Great Britain. Voyages

are to be fortnightly, every boat transporting between 1,300 and 1,400 tons of meats.

Plans for big development of ocean services between Brazil and Japan have been prepared by the Osaka Shosen Kaisha (Oshaka Steamship Co).

The Osaka Shosen Kaisha contemplates big extensions of its services, and started the construction of thirty-two steamers in different Japanese shipbuilding yards, more especially at Osaka, Kobe, and Nagasaki. The ships, added to the 160 already owned by the company, will give a fleet comprising 192 vessels. The company has a capital of 50 million yen.

The newly organized North and South Atlantic Steamship Line intends to open an office in Bahia. The company, which is Norwegian, has its main offices at Bergen, Norway. The line will give service between Bergen, New York, Rio de Janeiro, Santos, Buenos Aires, Bahia, Rotterdam, and Hamburg. The fleet consists of 13 newly built vessels, all oil burners, some of which are as large as 9,000 tons and have accommodations for 100 first-class passengers. The total tonnage of the fleet will be 68,000.

In March, 1916, direct steamship service by a Roumanian Line was commenced between Brazilian ports and Roumania. This traffic was interrupted by the war, but preparations are being made to reestablish it on a larger scale, employing for this purpose 10 vessels of 6,500 tons each, which are to ply from the Roumanian port of Brazila to Brazilian and Argentine ports, touching at Galata, Odessa, Trebizond, Constantinople, Salonika, Athens, Smyrna, and Alexandria.

The new Port of Recife, Pernambuco, has been opened to traffic. These port works were begun in 1917, during the administration of Dr. Affonso Costa, under the direction of a French corporation. The wharves, warehouses, and machinery of the port of Recife make it one of the most commodious and modern of the Atlantic ports of South America.

The State Government of Espirito Santo has requested of the Federal Government authorization to organize the port of Santa Cruz, which will ultimately be the outlet on the ocean for the ore of the Itabira Iron Mines in Minas Geraes. The same State also wants a seaport at Itaunas, which will be the outlet for a rich agricultural zone which holds forth splendid prospects for the future, and could at once export a large amount of timber.

An executive decree has been signed withdrawing from foreign vessels the privilege granted by decree of December 5, 1917, to engage a Brazilian intercoastwise trade.

FINANCE.

The Brazilian Government has ordinarily an annual deficit in its finances, which is covered generally by internal loans or other means.

According to a presidential message of May 3, 1919 the collection of public revenues in 1918 aggregated 103,519,715 milreis, gold, and 380,995,807 milreis, paper. This is 32,448,641

milreis, gold, and 67,417,192 milreis, paper, more than the amount estimated in the budget for the present year.

The principal items were: Import duties, 55,219 contos, gold, and 52,567 contos, paper; tax on consumption, 116,007 contos, paper; stamp tax, etc., 7 contos, gold, and 43,746 contos, paper; tax on income, 94 contos, gold, and 14,901 contos, paper; tax on inheritances 598 contos, paper; tax on industrial revenues, 486 gold, and 96,109 contos, paper; extra revenues, 221, gold, and 38,933 contos, paper; special revenues, 10,407 contos, gold, and 14,766 contos, paper; lottery, 1,067 contos, paper, and other revenues, 3 contos, gold, and 2,301 contos, paper.

The revenue for 1919 was estimated to have yielded about as much as in 1918, while the expenditures for 1919 were figured at about 86,171,000 milreis gold, and 588,508,000 milreis, paper.

The projected budget for 1920 submitted by the President to congress for approval fixes the nation's expenditures for the year at 80,953,000 milreis gold and 526,953,000 milreis paper, representing a decrease of 5,218,000 milreis gold and an increase of 61,555,000 milreis paper as compared with the sums appropriated for the expenditures of 1919.

In comparing the estimated income with the disbursements the government shows a balance in gold of 46,398,000 milreis and a deficit in paper of 168,069,000 milreis. By reducing the balance of gold at the exchange rate of 14d. to the paper milreis, or 89,483,000 milreis, the deficit in paper is reduced to 78,586,000 milreis (\$19,646,500 U. S. money).

The government referring to the income, states that the customs duties are calculated to bring 96,260,000 milreis gold and 79,165,000 milreis paper. The figure estimated for 1920 is higher than that of the last two years in view of the probable reestablishment of normal conditions in world commerce. The income from internal-revenue taxes is placed at 118,000,000 milreis.

The resources upon which the government can count in 1920 to cover the deficit, consists of emission of bonds, deposits of the Goyaz Railway, and the net income from the Lloyd Brasileiro, amounting to 2,825,000 milreis gold, and 12,500,000 milreis paper; which, after being deducted from the expenses, still leaves a deficit of 78,586,000 milreis, paper. This can be liquidated with the profits to be obtained from the coffee operations covered by the contracts of August 18, 1917, of the loan to the State of Sao Paulo. The profit of these operations is estimated at 80,000,000 milreis.

DEBT.

On January 1, 1919, the foreign debt of Brazil, consisting of the various loans negotiated since 1883, amounted to £116,432,274, or an increase of £984,058 since the same date of 1917. The increase in 1918 included £1,000,000 for the purchase of the Goyaz Railway and £47,758 for the issue of funding bonds for 1914.

State and Municipal Loans.

The various State of Brazil have the power to raise loans on their own account. A large number of the municipal loans, having been issued to carry out important public works, bear the guaranty as to principal and interest of the various State governments. Practically all of the guaranteed loans and a number of other loans have been floated in European markets and prior to the war were in favor with investors.

The following states have both foreign and internal loans: Alagoas, Amazonas, Bahia, Espirito Santo, Maranhao, Ceara, Minas Geraes, Goyaz, Matto Grosso, Pará, Parahyba, Paraná, Pernambuco, Rio Grande do Norte, Rio Grande do Sul, Rio de Janeiro, Santa Catharina, Sao Paulo and Sergipe.

The most important is the State of Sao Paulo whose external debt amounts to approximately £6,675,000 and internal debt to approximately 115,000 milreis.

Brazilian municipal external loans have found favor among European investors, and in the days before the war brought high prices. Rio de Janeiro, Sao Paulo, Pará, Bahia, Bello Horizonte, Manaos, Pelotas, and Santos have been the principal borrowers. Sao Paulo is the only municipality that has thus far contracted a loan in the United States, and its bonds have found a good market in New York. Another loan, this time for the City of Rio de Janeiro, has been successfully floated in the United States.

ECONOMIC CONDITIONS.

The economic situation in Brazil, very complicated since pre-war times, is showing a very healthy change owing to the fact that the country is rapidly becoming a producer and exporter of articles other than coffee, and is showing a substantially favorable balance every year.

A Brazilian authority sums up the situation, taking as a basis the year 1917, figures of which are complete and accurate, as follows:

The economic situation of Brazil can best be understood by comparing the following figures:

The importations and exportations of merchandise; the importations and exportations of bank notes and specie; the foreign public debt of the Federal Government, States, and municipalities; the expense of the Government abroad; the remittances sent abroad by private interests, composed of the interest on foreign capital applied in Brazil to loans and the companies financed abroad; Government funds deposited abroad by virtue of treaties, agreements, or other operations made in foreign parts with private interests or with governments.

The foreign-trade statistics are taken from the figures given by the Commercial Statistics Department. The remittances of private interests abroad are based on the average amounts for the last five years.

For the fiscal year of 1917 the figures were, in American money:

BRAZIL.

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Exports of merchandise	\$295,000,000
Imports of specie and bank notes	41,250
Government deposits abroad	20,000,000
Total	\$315,041,250
At the same time Brazil should be debited with the following gold valuation:	
Imports of merchandise	\$95,500,000
Expenses of the Government—Federal State, and municipal (foreign debt)	22,222,500
Other expenses of the Government in foreign countries, remittances of private companies, etc.	8,750,000
Total	\$126,472,500

Therefore the credit balance in Brazil's favor was \$188,568,750. This is all that saved the country from the consequences of the emission of inconvertible paper money; if it were not for this balance, exchange would be at 5 to 6 pence to the dollar, as it was in 1898, instead of the present rate of 13 pence, or 26 cents, United States currency.

In conclusion, the writer urged the government to limit the paper money to emissions based on a proportion of 1 to 5.

The public wealth of Brazil is calculated to be 30,000,000 contos, reckoned at follows: Unimproved property, 10,000,000 contos; improved property, 5,500,000 contos; personal property, 7,000,000 contos; live stock, 5,000,000 contos; railroads and ports 2,000,000 contos; manufacturing industries, 500,000 contos.

In 1918 and during the first quarter of 1919 the Brazilian Government put in circulation a number of issues of paper money for the purpose of offsetting its diminished revenues and in order to carry out plans authorized by Congress. On December 31, 1917, the outstanding currency was 1,389,414,967 milreis, which, plus the new currency issued from January, 1918 to March 31, 1919, 320,000,000 milreis, made a total on the latter date of 1,709,414,967 milreis. During the period from January, 1918, to March 31, 1919, bank bills were redeemed to the amount of 301,493 milreis, leaving in circulation on March 31, 1919, currency to the amount of 1,709,113,474 milreis.

The internal debt was 1,012,137,900 milreis. The currency in circulation was 1,709,113,473 milreis; the conversion fund, 20,922,410 milreis, gold; the guarantee fund, 48,391,020 milreis, gold; the unredeemed bills and notes, gold and paper, 14,632,500 milreis.

BANKING.

The following are the principal banks operating in Brazil:

Banco do Brazil, Rio de Janeiro. Capital, 70,000:000\$000; Paid up 45,000:000\$000; Reserve fund, 6,138:812\$555.
 Banco do Commercio de Porto Alegre. Established in 1895. Porto Alegre. Capital, milreis, 5,000,000. Has nine branches.
 Banco do Commercio e Industria de Sao Paulo, Brazil. Established in 1912. Capital, 10,000:000\$000. Reserve fund, 22,000:000\$000. Pension fund, 500:000\$000.
 Banco Commercial de Maranhao. Capital, paid up, milreis, 1,351,300.
 Banco Commercial do Para, Para, Brazil. Capital, milreis, 3,010,250. Res. fund, milreis, 1,600,157.

Banco Commercial Franco-Brazileiro. Porto Alegre, Brazil.
 Banco da Provincia do Rio Grande do Sul. Established, 1858.
 Head office, Porto Alegre. Capital, paid up, 5,000,000\$000. Reserve fund, 8,418,707\$610.
 Banco do Ceara. Fortaleza (or Ceara). Established, 1893.
 Capital, paid up, 600,000\$000. Reserve fund, 145,000\$000.
 Banco do Commercio. Rio de Janeiro. Capital, milreis, 7,000,0000. Reserve fund, milreis, 4,497,242.
 Banco do Recife, Pernambuco, Brazil, S. A. Established in 1900. Capital, authorized, 4,000,000 milreis; paid up, 2,000,000 milreis; reserve, 750,000 milreis.
 Banque Francaise Pour le Bresil. Established in 1911. Paris: 1 Boulevard des Capucines. Brazil: Sao Paulo; Agency at Santos. Capital subscribed and fully paid, 15,000,000 francs (\$3,000,000).
 Banco Nacional Ultramarino. Head office, Lisbon, Portugal. Paid-up capital, 7,200,000 escudos (\$7,565,000). Branch, Rio de Janeiro.

At the beginning of the fiscal year 1918, the Bank of Brazil had 20 agencies. They were increased to 40 before the close of that year, and all of them did a large and prosperous business. During the year referred to this bank bought foreign exchange to the amount of £11,796,557, and sold foreign exchange aggregating £11,799,698. In 1919 the shares of the Bank of Brazil were always above par.

The profits of the Bank of Brazil in 1918 were 19,780 contos. The reserve fund of this bank is 7,385 contos, and its total business in 1918 aggregated 1,182,245 contos—a sum representing nearly one-fifth of the banking business of the Republic.

The total assets of all banks operating in Brazil, both domestic and foreign in July, 1918, were 5,634,885,000.

When Brazil declared war upon the German Empire, three of the German banking institutions of Latin America operated in the country—the Brasilianische Bank fur Deutschland, the Banco Allemao Transatlantico, and the Banco Germanico da America do Sul.

The declaration of war of October 26, 1917, authorized the President of the Republic to take such steps as he deemed suitable for the national defense and public safety. The Government opened these institutions under the direction of a supervisor for each bank. From that time dates the actual control and supervision of the German banks, although it was not officially authorized until later.

The supervisors assumed their office immediately after appointment, and the banks could engage in no business from that date without the approval of the supervisor.

The oldest of the three German banks in Brazil was the Brasilianische Bank fur Deutschland, which was allowed to operate in the Republic by special decree, granted September 7, 1888, for a period of 20 years, extended by another decree of August 27, 1904, for 10 years more. The bank operated in Brazil with important branches in Bahia, Sao Paulo, Santos, and in Rio Grande do Sul. Through its branches in Sao Paulo passed practically all of the coffee movement of Brazil.

The Deutsche Ueberseeische Bank and the Deutsche Sudamerikanische Bank were authorized to operate in the Republic by decrees granted in 1911 for the period of 20 years. The Deutsche Ueberseeische Bank, after the declaration of war closed all of its

branches in Santos and Sao Paulo, and continued to operate only in Rio de Janeiro. The Deutsche Sudamerikanische Bank had no branches in other towns of the Republic, and operated only in the capital.

In July 28, 1918, that the Minister of Finance ordered the suspension of the operations of the German banks, prohibiting from that date forward all new transactions and permitting only the completion of those which had already been started.

A decree issued October 11, 1918, cancelled the authorization given for them to operate in Brazil and set a period of six months for their liquidation.

When the fiscalization began the banks had already been seriously affected by the war, and after the United States became a belligerent business was reduced to a minimum. The Brasiliensche Bank, the most deeply rooted of these institutions in Brazil, showed a balance of 280,000 contos of milreis in June, 1914, (about \$70,000,000), which had been reduced to 130,000 contos (about \$32,500,000) by June, 1917; that is, to less than half of its balance in 1914.

A decree of August 7, 1919, suspended the fiscalization of German banks and insurance companies and removed the restrictions imposed by the Government on foreign commerce with Germany. Operations in marks, which had been suspended during the last two years, opened with a speculative fever of making up for lost time. By the end of August 26,986,910 marks had been sold and 10,465,276 bought. During the first five days of September this movement continued, operations amounting to 7,474,363 marks sold and 2,300,000 bought.

The Federal Government conceded authorization to the National City Bank of New York to establish a new agency in Porto Alegre, State of Rio Grande do Sul, and a new subagency in the city of Rio Grande in the same State.

By decree of March 26, 1919, the Sociedade Anonyma London & River Plate Bank (Ltd.), whose home office is in London, was permitted to establish a branch in Porto Alegre and agencies in the cities of Rio Grande and Pelotas, State of Rio Grande do Sul, Brazil.

The British Bank of South America (Ltd.) has requested authorization to establish branches in Porto Alegre, Pelotas, and Recife (Pernambuco).

The Royal Bank of Canada has been authorized to operate in Brazil with a branch in Rio de Janeiro and agencies in the States of Bahia and Pernambuco and in the cities of Porto Alegre, Santos, and Sao Paulo.

The American Foreign Banking Corporation of the United States has established a banking branch in Rio de Janeiro with a declared capital of \$1,200,000.

Under executive decree, dated May 7, 1919, the Yokohama Specie Bank (Ltd.) is authorized to do business in the country, to establish a branch at Rio de Janeiro and agencies in the cities of Sao Paulo and Santos. The capital of this bank is 48,000,000 yen.

The London and River Plate Bank has been authorized to

establish a branch at Porto Alegre and agencies at Rio Grande and Pelotas.

During May and June, 1919, the following banks were established in Brazil: Bank of Holland & South America, Bank of Portugal & Brazil, and the Guaranty Trust Co. of New York in Sao Paulo; National City Bank of Recife and the National Bank of Commerce of Porto Alegre at Curitiba with agencies at Rio Negro and Porto de Union, State of Parana. The Popular Bank of Rio Grande do Sul and the Industrial and Agricultural Bank have been established at Porto Alegre. The National Ultramarine Bank of Brazil opened a branch in London with the object of developing Brazilian commerce in Europe.

The banking house known as the Banca Italiana Di Sconto De Roma has obtained permission from the Brazilian Government to do business in Brazil, and has established branches in Rio de Janeiro, Sao Paulo, and Santos. This bank has a capital of 315,000,000 liras and a reserve fund of 30,000,000 liras. Capital set aside for operations in Brazil amounts to 5,000 contos.

The Banco Nacional de Comercio of Porto Alegre has just established a commercial information service to give all data regarding markets and foreign commercial firms to planters and manufacturing industries.

It is reported that the Banco Industrial Americano is about to erect in Rio de Janeiro ten thousand American style wooden houses, to be sold at prices of \$400, \$600, and 1,000 each, according to size, the payments to be made by installments.

The total assets of all banks operating in Brazil, both domestic and foreign, on July 31, 1918, were 5,634,885,000 milreis, as compared with 5,595,661,000 on June 30, of the same year and 4,444,174,000 on July 31, 1917, that is, one year later.

The governor of the State of Sao Paulo promulgated, on August 23, 1918, a law establishing a mortgage credit bank in the city of Sao Paulo, the object of which is to lend money to agriculturists and public officials.

The development of the banks of the state of Rio Grande do Sul has been enormous. These banks are: Bank of the Province, founded in 1858 with a capital of 1000 contos, divided into 5,000 shares of 200 milreis each. In 1910 the bank increased its capital to 10,000 contos. The dividends paid during the 121 half years of its existence amounted to 23,304 contos. It now has 12 agencies, 16 branches and 63 correspondents in Brazil in addition to its business connections in Europe, the United States, and a number of countries of South America. The National Bank of Commerce, which was founded in 1895, with a subscribed capital of 2,500 contos, increased its capital in 1910 to 5,500 contos, and in 1917 to 10,000 contos. This bank has 26 branches and 58 correspondents in the rest of Brazil. The Pelotense Bank was established in 1906 in the city of Pelotas with a capital of 3,000 contos, which was increased in 1910 to 5,000 contos, in February, 1913, to 10,000 contos, and in March, 1918, to 15,000 contos. During the latter year, in addition to the accustomed dividend of 12 per cent, half yearly dividends of 2 per cent. were paid shareholders, making the total earnings during that year 16 per cent. It has 21 branches, 30 agencies,

and 93 correspondents in the State, and on January 1, 1919, had on deposit 102,000 contos, while its shares, which have a nominal value of 120 milreis, were quoted at 225 milreis. The Franco-Brazilian Commercial Bank was founded with a capital of 6,400 contos, and pays a dividend of 8 per cent. It has a reserve fund of 523 contos. The Porto Alegre Bank, established in 1906 with a capital of 120 contos, to advance money and make loans to State and municipal employees, gradually increased its funds until in 1915 they amounted to 1,000 contos. During that year this institution decided to enter the regular banking business with a capital of 2,000 contos, which sum was increased at different times until in February last it amounted to 4,000 contos. Its shares are at a premium of 50 per cent. The five banks mentioned had on January, 1919, reserve funds aggregating 23,854 contos and deposits amounting to 312,256 contos, or more than \$78,000,000.

MONEY.

The coins are as follows:

Bronze coins, 20, 40 reis	1 real (plural reis)
Nickel coins, 100, 200, 400 reis	(100 reis = 3¼ c)
Silver coins, 500, 1,000, 2,000 reis.	(400 reis = 13 c)

1,000 reis is called 1 milreis—32¼ c. is expressed—1\$000. Paper, 1 and 2 milreis (being withdrawn), 5, 10, 20, 50, 100, 500, 1,000 milreis.

1,000\$000 is called a conto of reis, worth about \$335.93, thus \$1.00 is worth almost 3\$000.

The Brazilian Congress enacted a law authorizing the mintage of nickel coins of the following denominations: 20, 50, 100, 200, and 400 reis.

The notes recalled are of denominations as follows:

5 milreis, 8th, 9th and 10th series; 10 milreis, 8th and 9th series; and 200 milreis, 10th series. Also 20, 50, 100, 200 and 500 milreis. The notes recalled suffer a gradual decrease in their value each year until worthless.

The legal tender is as follows:

Silver up to 29 milreis; nickel up to 1 milreis; and bronze up to 200 reis.

The weight of the coins as follows: 20 milreis (gold) 17.93/100 grammes; 10 milreis (gold) 8.965/1000grammes; and 5 milreis (gold), 4.482/1000 grammes.

RAILROADS.

In 1854 the first railroad line opened in Brazil was the Maua line, and on May, 1858, the first section of the Central Railway was opened (then called Don Pedro II.)

The railway system of Brazil has a length at the present time of 30,101 kilometers, distributed by States as follows: San Paulo, 6,706; Minas Geraes, 6,527; Rio de Janeiro, 3,131; Rio Grande do Sul, 2,756; Pernambuco, 2,098; Bahia, 1,839; Matto Grosso, 1,168; Parana, 1,064; Santa Catharina, 1,018; Ceara, 891; Espiritu Santo, 652; Para, 450; Parahybam, 368; Alagoas, 364;

Rio Grande do Norte, 313; Sergipe, 292; Federal District, 187; Goyaz, 179; Maranhã, 91; and Amazonas, 6.

When complete, the entire system will join up the railways of Brazil with those of Uruguay, Argentine and Paraguay.

The railroads in Brazil are divided into three groups: The system belonging to the Brazilian Government, comprising 15,251 kilometers; the system owned by private companies, with a trackage of 10,051 kilometers; and the railways of the State Governments, which are 2464 kilometers in length. In the first group there are 6,420 kilometers under the management of the Government, and 8,850 kilometers under management of lease-holding companies. The lines operated and owned by companies are:

Sao Paulo, 3,952 kilometers; Minas Geraes, 1,880 kilometers; Rio de Janeiro, 1,515 kilometers; Santa Catharina e Parana, 1,487 kilometers; Espirito Santo, 607 kilometers; Rio Grande do Sul, 186 kilometers; Pernambuco, 154 kilometers; Other States, 165 kilometers.

The third group is formed by 1,826 kilometers of road owned by the State of Sao Paulo, 321 kilometers owned by Bahia, and 316 kilometers owned by Para.

Government Subsidies.

The Government only constructed or bought the railroads it owns today, and assisted several companies by guaranteeing the interest on the capital invested in the construction of the lines. In 1918 the Government paid nearly \$4,500,000 as guaranty of interest. The Sao Paulo Rio Grande received \$2,671,286; the Victoria-Minas received \$1,082,269; the Government's lines of the Sorocabana, \$321,263. The small line with 68 kilometers in traffic on the bank of the Tocantins River, \$148,399; the lines subsidized of the Leopoldina, \$174,340; and in Minas Geraes the Jaguarã-Araguary line of the Mogyana system received \$133,105.

Incomes of Various Railways.

Only the Sao Paulo Railway, the Mogyana, the Paulista, and a part of the Leopoldina line earned income enough in 1918 to cover expenses and meet the interest on the capital invested in the construction. The private lines in the coffee districts are prosperous.

The gross income per kilometer of the different lines during 1918 was as follows:

Sao Paulo Railway Co. (English line), \$32,784; Central of Brazil, \$6,271; Paulista, \$6,625; Mogyana, 3,563; Sorocabana, 3,177; Leopoldina, \$2,446; Great Western, \$1,737; Auxiliaire (Rio Grande do Sul), \$1,683; Western of Minas, \$1,556; Parana & Santa Catharina system, \$1,489; South of Minas system, \$1,084; Ceara Railroads, \$894; Bahia Railroads, \$773; Great Southern (Rio Grande do Sul), \$476; Caixias to Cajazeiras, \$435.

The confidence of the public in Government management is increasing. The Federal Government operates the Central of Brazil (2,400 kilometers), Western of Minas (1,400 kilometers),

North Western (1,270 kilometers), and Ceara (891 kilometers) lines.

No leaseholdin company in Brazil manages its railroads better than does the Government.

On July 19, 1919, the Legislature of the State of Bahia authorized the extension of the Santo Amaro Railroad, a state-owned road, from Dom Jardim via Villa de Coracao de Maria to the city of Irara and opened the necessary credit for the execution of the work.

The Government has approved plans for the electrification of the suburban lines of the trunk line from Barra to Pirahy, of the Central Railway of Brazil.

The type selected is of high tension, continuous current for the suburban service, and the current is to be purchased from one of the existing power companies rather than have the company install a plant of its own.

The approximate cost of the rolling stock, substations, aerial lines, etc., is estimated at \$4,307,377. This does not include the cost of car sheds at the main station and at Deodoro.

The Director of the Central do Brazil believes that this work can be completed in time for the centenary of Brazilian independence, in 1922. Plans are also being made to enlarge the railway shops, and estimates for this work will be included in the current year's appropriations.

Plans for the construction of a railroad in the State of Sao Paulo are under consideration. The line is to extend from Pederneras through Agua Limpa, Saturno, and Poco Alcalino de Quilombo to the Batalja River at Rainha dos Anjos do Baalha, thence northwest to Miguel Calmon, traversing 111 kilometers through a very fertile region rich in woods.

A railroad line is planned which will connect the three mountain towns Petropolis, Therezopolis, and Friburg. The route will be one of the most picturesque and fascinating in the country.

A concession has recently been granted to Antonio Amorin do Amaral for the building of a railroad from Amapa in the State of Para to Oyapock on the boundaries of the French Guiana. The region covered by this concession, which also embraces a strip of land estimated to be 9.4 miles on either side of the line, is said to be rich in lands suitable for cattle raising, and to possess immense forests of timber of all kinds, especially that containing essences. The famous gold mines of the Guianas which have produced so much alluvial gold in the past, are crossed by this line, and it is proposed to build a branch line that will touch the famous French Guiana mines, which are still producing large amounts.

The Legislature of the State of Bahia has opened a credit for the extension of the State-owned railroad, the Estrada de Ferro de Nazareth. This line has at present 221 kilometers of track in operation, 30 in the course of construction, and surveys completed for an additional 35 kilometers. The work has been at a standstill since June, 1918, on account of an insufficient appropriation to cover the expenses of construction.

The Government of the State of Rio Grande do Sul is building a state railway line from Carlos Barbosa to Alfredo Chaves. Several other lines are contemplated.

The French banks which in the past have made important loans to the Brazil Railway Co., have resolved to grant additional loans. Bonds on first mortgage will be issued in accordance with a recent agreement with the creditors to the amount of 80,000,000 francs (\$15,440,000) to be used for repairs, upkeep, and purchase of materials, etc. The company has been reorganized, new officers chosen, and plans to make all improvements necessary to increase the efficiency of the road and meet the demands of the producers and manufacturers throughout the south of Brazil have been adopted.

The railway company has liquidated its bonds of the French series bearing 4-½ per cent. interest, due on February 1, 1919. These bonds were guaranteed by 100,000 shares of the Mogiana Railway and 50,000 shares of the Sao Paulo Railway.

The Government of Brazil is said to be disposed to renew railway concessions upon the promise of the interested parties to import immediately large quantities of railway materials and supplies.

The Government proposes to combine the facilities of the Sao Paulo, Sorocabana, and the Itapura-Corumba railways, thus creating a railway system extending from the port of Santos via Sao Paulo through the rich coffee country across the north-west of Brazil, traversing the vast cattle country of southern Matto Grosso. A new railway is also in contemplation across the coastal range of Brazil from Angra dos Reis, midway between Rio and Santos, via Barra Mansa into the heart of the State of Goyaz.

The President specified the dates for the construction and delivery of the following railway lines: From Sao Sebastiao do Paraíso to Passos, December, 1920; the Biguatinga to Jacuhy extension, February 24, 1921; and November 15, 1921, for the Pratinha to Santa Rita de Cassia branch and the extension from Passoa to kilometer 24.5 toward Sao Jose de la Barra.

The Government has appointed a commission recently to make a special study and recommendation for the adoption of uniform types of equipment and material to be employed in the Government railway systems of Brazil.

POSTS AND TELEGRAPHS.

The postal service in Brazil was organized in 1829, and in 1848 the first postage stamps were issued.

At the beginning of 1919 there were 3,642 post offices in the Republic, as follows: Special offices, 5; first-class offices, 46; second-class offices, 225; third-class offices, 974; and fourth-class offices, 2,392. These offices employ 4,564 persons.

The registered letter and parcel-post service, suspended during the war, has been resumed. The post offices in Rio de Janeiro, Bahia and Pernambuco are empowered to perform this service. The offices of the other states will perform this ser-

vice through the intermediary of Rio de Janeiro, Bahia, and Pernambuco. This service is to be exchanged with the offices of Hamburg, France, Amsterdam, London, Lisbon, and Argentina.

During the war parcel-post service was in effect only with the United States and Argentina. The conditions for these two countries are as follows: Maximum dimensions 60 by 60 by 60 centimeters, except for umbrellas, canes or maps, which can be of 1.05 meters in length. The limit of weight for packages for the United States is 10 kilos, and for Argentina 5 kilos. To the former country a tax of 400 reis is assessed for each pound, and a fixed charge of 300 reis for the registry.

Money orders can be sent to most foreign countries but only in francs.

In 1918 the length of the telegraph system of Brazil aggregated 41,996 kilometers, as compared with 39,666 kilometers in 1917. In 1919 there were 3,897 kilometers of line under construction. In 1918 telegrams to the number of 5,350,606 were transmitted, or 945,156 more than in 1917.

On October 24, 1914, the President signed an executive decree conceding to the representative of the Central & South American Telegraph Company, Frank Carney, without monopoly or privilege of any kind, and without subvention from the Government of Brazil, either through himself or through companies which he may organize, the right to lay a submarine cable linking the cities of Santos and Rio de Janeiro to any part of the territory of Uruguay and to carry out telegraphic communication.

On the same date the President signed a decree granting the Central & South American Cable Co. a concession to lay from Rio de Janeiro to Cuba, a cable which is to run by way of the Island Fernando de Noronha.

By decree of September 6, 1918, the President of Brazil declared null and void the concession granted in July, 1908, to Felten & Guillaume—Lahmeyerwerke Actien Gesellschaft, of Mulheim on the Rhine, and later transferred to the Deutsch-Sudamerikanische Telegraphengesellschaft A. G. to establish and operate, without monopoly, an ocean telegraph cable between a point on the coast of Brazil and the island of Teneriffe.

Work on the telephone lines between the cities of the coast and of the interior is being rapidly carried on, and telephone communication has already been established between Sorocaba and Rio de Janeiro.

The greater part of the telephone lines of the State of Rio Grande do Sul is now owned and controlled by one company, which has its headquarters in Porto Alegre. A great deal of the equipment now in use was purchased in Germany, but gradually the company is buying modern material from the United States. The three largest cities in the state—Porto Alegre, Pelotas, and Rio Grande—are all equipped with German switchboards, which are now about worn out. The capacity of the Porto Alegre board is 10,000 lines, and there are 5,000 subscribers; the Pelotas switchboard has a 5,000-line capacity, and there are 2,000 subscribers; and the Rio Grande switchboard has a capacity of 2,000 lines with 500 subscribers at present. Other

cities such as Bage, Caxias, Santa Cruz, Sao Leopoldo, and Cachoeira have subscribers in smaller numbers, and the total for the entire State is important.

The company is at present making plans for the installation of automatic telephones in Porto Alegre, and when this is effected the material replaced by the more modern equipment will be transferred to the smaller cities.

By decree of October 23, 1918, the President of Brazil granted to Joao Teixeira Soares and Antonio Rossi a concession to establish either under their own management or under that of a company which they may organize, an airplane service between the principal cities of Brazil. The stations to be established will include the capitals of all the States, the concessionaires being empowered to extend the service wherever the demand seems to warrant such extension. The service between the capitals must be in operation within two years, the Government reserving the right to extend the time for two years more.

The concessionaires' activities will comprise the carrying of small packages and mail; but, with the further development of aviation, passenger transportation will be permitted upon the approval of the Government. The number of trips required and the tariffs will be fixed by the Federal Government, but no mail matter may be transported that is not first properly stamped and post-marked.

The concessionaires must admit Government student aviators to their machines and hangars.

By decree of April 26, 1919, permission was granted to Handley Page (Ltd.), without monopoly or special privileges, to organize and establish an aerial service of transportation for passengers and cargo by means of aeroplane or hydroplane between the principal cities of Brazil.

The Government has authorized by decree of January 15, 1919, the opening of a special credit to the Ministry of War for an amount of 2,000 contos of reis, to be used in organizing an aviation service, buying aeroplanes, establishing aviation schools, and purchasing accessories.

PUBLIC WORKS.

The automobile road from Santa Rita to Jotahy, via Rio Negro in the State of Goyaz, has been officially opened. The road is 375 kilometers long and a trial trip was made over it in 11 hours.

The Government of the State of Ceara, Brazil, is building roads connecting the municipal districts of Macejama, Porangaba, and Soure with Fortaleza. The State is also promoting the construction of an electric tramway line between Fortaleza and Porangaba.

The Legislature of the State of Bahia, Brazil, has instructed the Department of Public Works to begin at once surveys for the construction of a canal from Marro de Sao Joao; a canal to join the Boipeba and Santarem Rivers; and to cooperate with the municipalities of Cannavieras and Belmont to repair the present

canal joining these cities but which has long fallen into disuse.

A bill before the Brazilian Congress provides for an appropriation of about \$60,000,000 for the construction of irrigating canals and other works to make possible the settlement of sparsely populated districts.

The Legislature of the State of Bahia, Brazil, has recently approved a project for the dredging of the River Grande, an affluent of the River Sao Francisco, for the purpose of making possible a line of river boats to serve a district with no railroad facilities.

The Government of the State of Rio Grande do Sul has made a contract for such dredging of the Santa Maria and Ibiruhy-Mirim Rivers as may be necessary to make them navigable for vessels of small draft.

An executive decree of May 21, 1919, approved the plans for the improvement of the port of Rio de Janeiro, and arranged for the expropriation of the lands necessary for carrying out these improvements.

An extensive road-building program was approved by the Legislature of the State of Bahia, to provide direct and easy communication between its seaports and the interior.

The first is a modern highway, to reach from Bahia City, the State capital, to Abrantes, 60 kilometers distant and will serve the towns of Moricoca, Bolandeira, Jaguaripe, Pedra de Sao Thome, Portao, and Arambepe en route.

Another road is to traverse the rich cocoa district in the south of the State for approximately the same distance between the port of Ilhéos and the interior city of Itabuna. Two branches from the main highway will also be built. One of these will run to the settlement of Falsquerira in the north and the other on the south will reach to the left bank of the River Pardo, serving the cities of Barra do Rio de Contas, Una, and Cannavieiras.

Surveys have been ordered for a third road to reach from Serrinha to the city of Bom Conselho, passing through the towns of Aracy, Tucano, and Pombal.

PUBLIC UTILITIES.

The most important public-utility companies operating in Brazil with their authorized capital stock are:

Brazilian de Energia Electrica, 30,000,000 milreis; Brazilian Traction, Light & Power, 4,000,000 milreis; Carioca, 2,500,000 milreis; Carris Urbanos, 6,000,000 milreis; Electricidade e Lavoura, 120,000 milreis; Electricidade e Machinas, 300,000 milreis; Electricidade de Sao Paulo e Rio, 1,200,000 milreis; Electricidade e Viacao Urbana de Minas Geraes, 1,500,000 milreis; Fluminense de Forca e Luz, 500,000 milreis; Forca e Luz Cataguazes-Leopoldina, 400,000 milreis; Forca e Luz de Campos, 2,450,000 milreis; Forca e Rede Jahu, 205,000 milreis; Forca e Luz N. Fluminense, 550,000 milreis; Forca e Luz de Sao Paulo, 2,500,000 milreis; Forca e Luz de Palmyra, 200,000 milreis; Forca e Luz Rio Preto, 345,000 milreis; Forca e Mineracao Sta. Anna, 45,000 milreis; Industrial de Electricidade, 2,000,000 milreis; Jardim Botânico, 21,000,000 milreis; Luz Forca de Minas Geraes, 800,000 milreis; Mineira de Electricidade, 2,500,000 milreis; Mineira de Energia Electrica, 200,000 milreis; Paranaense de Electricidade,

650,000 milreis; Paulista de Electricidade, 2,000,000 milreis; Paulista de Força e Luz, 2,000,000 milreis; Pernambuco, 2,000,000 milreis.

INSURANCE.

The following are the most important insurance companies, mostly local, doing business in the Republic of Brazil, with their capitalization:

Anglo-Sul-Americana 2,000,000 milreis; Alianca da Bahia, 3,000,000 milreis; A Mundial, 500,000 milreis; Argos Fluminense, 2,100,000 milreis; Brasileira de Seguros, 2,000,000 milreis; Brasil, 1,000,000 milreis; Caixa Geral das Famílias, 1,600,000 milreis; Confiança, 2,000,000 milreis; Cruzeiro do Sul (life insurance), 800,000 milreis; Garantia, 2,500,000 milreis; Indemnizadora, 1,000,000 milreis; Integradade, 2,000,000 milreis; Minerva, 1,000,000 milreis; Paulista, 2,000,000 milreis; Pelotense, 2,000,000 milreis; Previdente, 2,000,000 milreis; Sul America (life insurance), 500,000 milreis; Taregistas, 1,000,000 milreis; Uniao dos Proprietarios, 500,000 milreis.

On October 1, 1918, the American Insurance Co., with a capital of 2,500 contos started in business in the city of Sao Paulo.

The President of the Republic has authorized the Atlas Assurance Company, Ltd., of London, to engage in the fire insurance business in the Republic.

By decree of December 4, 1918, the President of Brazil authorized the Liverpool & Globe Insurance Company to operate in Brazil.

The operations of the company will be limited in proportion to its capital, to the sum of 1,000 contos of reis, and it is obliged to deposit in the National Treasury the sum of 250 contos of reis, represented by Brazilian Government bonds, in order to obtain its license.

FOREIGN INVESTMENTS.

Nearly all of the investments in Brazil came from Europe. Brazil's debt to other parts of the world is small. North America has done remarkably little for Brazil. It is only within the last few years that American money has entered Brazil. Never was money invested in Government or State loans, development work in railways, harbors, or city improvements. Up to the end of 1917, no Brazilian securities were listed upon the New York Stock Exchange, as the present time only the Sao Paulo bonds are dealt with in this market.

British investments in Brazilian securities are estimated at £226,719,052, or in American money about \$1,000,000,000. The French investment is estimated at Fr. 1,500,000,000, and Belgium, with considerable railway interests, at about half this sum. Germany and Portugal hold a certain quantity of Brazilian securities.

Brazil's direct debt to France includes \$52,000,000 for three loans with which the Bahia, Goyaz, and Corumba Railways were constructed. There are also state debts, that of the State of Para being held by Meyer Freres of Paris, while the Société Marseillaise holds the bonds of the big Amazonas debt. Part of Sao Paulo's debt is owned to the Société Générale, and the State

of Espirito Santo owes nearly \$10,000,000 to the Banque Francaise et Italienne, as well as large sums about which a dispute rages, advanced by the French Hypothecary Bank.

There is a great deal of French money in the Madeira-Mamoré railway, one of the Farkuhar undertakings, which cost the equivalent of more than \$30,000,000, is said to need much reconstruction already—it was opened to traffic in 1912—and does no more than pay its way. Part of the Minas Geraes and Rio de Janeiro debt is held by French bondholders. Several of the existing railways were built by French engineers and French money. In 1906 a French firm, Compagnia Francaise de Rio Grande do Sul put Fr. 150,000,000 into the port works of that city, opened to shipping November 1916.

FOREIGN COMPANIES.

The American Chamber of Commerce for Brazil has published an important pamphlet on "Legal Requirements for Operations of Foreign and Domestic Corporations in Brazil", prepared for it by Richard P. Momsen, the chamber's legal adviser and a former American consular officer.

According to that pamphlet, until recently, the majority of foreign firms limited their activities in Brazil to the appointment of an agent or representative. Such an agent or representative. Such an agent or representative is usually a locally established firm, or a person sent to Brazil to represent the foreign company's interest there.

Whenever a corporation or firm sends a representative to Brazil, whether for the purpose of merely traveling through the country for a short period of time, or of permanently establishing himself as a representative, his principals should invariably provide him with a power of attorney in order that he may properly represent their interests. Countless instances may be cited where representatives of foreign interests have become involved in serious difficulties with the local customs authorities and other Government departments, where they have been unable to protect their principals in matters of patents and trade-marks, where they have been prevented from closing important contracts for want of authority, where they have lost opportunities of advantageous agency arrangements, and where they have been barred from the Brazilian courts, because they were not provided with a proper power of attorney to prove their legal capacity.

A power of attorney must be properly authenticated by a Brazilian consular officer in the country of its issuance. Powers of attorney transmitted by telegraph are legal to represent a creditor in bankruptcy proceedings provided they are authenticated by a Brazilian consular officer. Certain government departments have accepted powers of attorney sent by telegraph through Brazilian consulates abroad.

Foreign Firm Acquires no Legal Status.

Whenever a foreign corporation or firm limits its activities to the services of a representative in Brazil, it acquires no legal status in Brazil which frequently proves detrimental and at times

even disastrous. The representative is not permitted to carry on business in the name of the corporation, but only in his individual name. He is required to pay taxes to both the Federal and the local governments in his individual capacity, for he can carry on business only in such capacity, although no objection is made to his holding himself out as the representative of his principals. If his principals consign merchandise to themselves here, that is, to the corporation or firm, which has no legal status here, great difficulties will be encountered in the customhouses in clearing the goods. In case of the death of such a representative, the entire business automatically ceases, and the firm must again commence anew. The burden of proof of ownership of moneys and goods in the representative's possession at the time of his death falls upon the corporation or firm, and if his books are not kept with great scruple and care, considerable expense and much delay are necessarily incurred. Until some other person possessing a power of attorney appears, the firm's property can not be disposed of except by the courts. If the representative absents himself he must give a power of attorney to his substitute or successor.

It is true that the company abroad saves the initial expenditures of incorporation and that the yearly business tax is somewhat less than under corporate management, but such a policy has often been found disastrous.

Foreigners may freely establish partnerships in Brazil among themselves or they may associate themselves with Brazilians. Partnerships of foreign countries can acquire no legal status in Brazil, nor does Brazilian law provide for the registration or domestication of such partnerships. All partnerships must be formed locally, and duly registered with the board of trade. A partner there may not sign any partnership agreement on behalf of another partner residing abroad without a specific and complete power of attorney from such other partner, this power of attorney being duly authenticated by a Brazilian consul.

If a partnership abroad wishes to operate in its own name in Brazil, the simplest method is to form a corporation and to apply to the Brazilian Government for the domestication of the corporation. In this manner legal status may be acquired.

The method by which a foreign enterprise enters the commercial field of Brazil is one of the principal problems confronting those interested in such a project, and to a great extent often determines the success or failure of the venture. This immediately requires careful consideration of Brazilian legislation concerning the rights and obligations involved, the present important problem of taxation, and the practicability of each method as affecting the size and character of the enterprise.

Foreign corporate organizations whose commercial interests in Brazil are of a permanent character unquestionably find greatest protection under Brazilian law by establishing a corporate legal status in this country. The constitution of Brazil, and the laws of the Republic in no way discriminate against foreign corporations, and the legal formalities as well as the tax assessments are equitable and reasonable. Banks and insurance companies

require additional guarantees whether the corporations be domestic or foreign.

The two methods available are (1) domestication of the foreign corporation by obtaining authorization of the Brazilian Government to operate in the Republic, and (2) organization of a purely Brazilian corporation.

Advantages of a Domesticated Foreign Corporation.

A domesticated corporation requires but one legal representative in Brazil who is responsible for the company's operations in this country. A Brazilian corporation requires at least seven incorporators and the same number of stockholders, as well as a board of directors, advisory committee, and substitutes, who perform their duties in Brazil. The board of directors of a domesticated corporation reside in the foreign country and the corporate administration is carried on there.

A domesticated corporation is purely an organization of the country of its origin, and as such it is entitled to diplomatic protection.

A domesticated corporation is exempt from the payment of the Brazilian Federal corporate dividend tax of 5 per cent. levied upon corporate dividends. This exemption in favor of foreign corporations was intended to foster the introduction of foreign capital into Brazil, and, as it is provision of the annual budget law, there is no guarantee of its continuance indefinitely. Beyond the annual business taxes levied by the Federal and local governments there is no income or corporation dividend tax on domesticated corporations, except in the State of Sao Paulo, where a corporate income tax law was recently enacted.

The policy and internal administrative acts of a domesticated corporation are determined and carried out in the home country of the corporation according to the laws of that country.

Advantages of a Brazilian Corporation.

1. With the exception of certain classes of corporations, such as banks and insurance companies, no special permission is required by the Brazilian Government. As a matter of practice, however, the Brazilian Government does not oppose domestication of foreign corporations in this country, provided their operations are not contrary to the laws, morals, and customs of the country.

2. The Government does not have the authority to cancel the company's right to operate, which it reserves for itself in the case of domesticated corporations.

3. It is frequently desirable for foreign capitalists to obtain the participation of Brazilian capital and Brazilian managing directors.

It is true that if the stockholders of a Brazilian corporation are American citizens, they are subject individually to an assessment upon their earnings from this source, but the extra and special corporation taxes on surplus profits, etc., are avoided. At the same time, however, Brazilian corporations are subject

to a tax of 5 per cent. on declared corporate dividends. The Minister of Finance recently held that stock dividends are also subject to this tax.

Domestication of Foreign Corporations.

For the purpose of obtaining authorization to operate in Brazil as a branch of an American corporation, the following documents are necessary:

1. Copy of the charter of the corporation in the United States.
2. Copy of the by-laws of the corporation in the United States.
3. Original act of incorporation showing the list of original subscribers and the number of shares held by each.
4. Special power of attorney of the incorporation in the United States; to petition authorization to operate in Brazil, and to accept changes in the by-laws proposed by the Brazilian authorities.
5. General power of attorney of the corporation in the United States granting full powers as a representative of the company. This should be sent in duplicate.
6. Certificate of special resolution of the board of directors of the corporation in the United States authorizing operations in Brazil and stating the amount of capital destined for such operations. This document is very important; otherwise in the assessment of any capital or stamp taxes which may be imposed, the entire capital of the corporation in the United States will be used as a basis of calculations.

If, however, the capital liability of the corporation for its operations in Brazil is to be less than the amount of its capital in the United States, it is more practicable to form a separate corporation, and for the domestication of such a corporation it is necessary to furnish the same documents, with the exception of No. 6 (the certificate of special resolution), which may be dispensed with when the articles of incorporation expressly provide for operations in Brazil on the basis of the total capital liability.

It is absolutely essential that each of the above documents be legalized by a Brazilian consular officer in the United States.

It is not necessary for the corporation to have officers, directors, or stockholders in Brazil, but the designation of a representative with full powers to settle all questions arising out of the corporation's operations in Brazil is required before the corporation will be permitted to carry on business.

The expenses for initiating operations are:

Stamp tax for decree of authorization: Rs. 300\$000.

Stamp tax on the capital authorized and realized for operations in Brazil, at the rate of 2 milreis (Rs. 2\$000) per conto de reis (1,000 milreis) or fraction thereof; all calculations made at the official rate of exchange of the Camara Syndical de Corretores (Official Board of Brokers) on the afternoon of the day of payment to the national treasury. This is equivalent to a tax of two-tenths of 1 per cent. on the capital.

Expenses for registration of the Government decree, by-laws, and other documents in the Junta Commercial (Board of Trade),

which range from 50 milreis (Rs. 50\$000) to 80 milreis (Rs. 80\$000).

Expenses for publication of the decree and other documents in the *Diario Official* (Official Gazette), which amount to 400 reis (Rs. \$400), more or less, per line as published.

Expenses for translation by the public translator, which vary according to the length of the document, or about 8 milreis (Rs. 8\$000) for each typewritten page.

Deposit in the Bank of Brazil (a Government institution) of a tenth part of the capital devoted to operations in Brazil, the bank collecting a commission on the amount of the deposit according to the following scale: One-half of 1 per cent. on deposits when the capital is up to Rs. 50:000\$000; one-third of 1 per cent. on deposits when the capital is from Rs. 50:000\$000 to Rs. 100:000\$000; beyond this amount the commission depends upon the resolution of the directorate of the Bank of Brazil. The deposit of a tenth part of the capital will be returned to the company as soon as the registration of the decree and documents at the Board of Trade has been effected.

If the corporation desires to establish branches in the several States of Brazil, there will be no additional initial expenses for obtaining permission to operate, since the petition for the first decree of authorization will cover the whole territory of Brazil.

Taxation of Domesticated Foreign Corporations.

Domesticated foreign corporations, if located in the Federal District of Brazil, are subject to the following taxes:

Federal Government tax on industries and professions. This tax is of two kinds: Fixed tax based on the nature and class of the business or profession, and proportional tax based on the annual rental of the place of business.

The proportional tax is likewise regulated according to the nature of the business or profession, and divided into three classes, which are subject, respectively, to a tax of 20 per cent., 10 per cent., and 5 per cent. of the annual rent of the place of business.

There is an additional special Federal tax of Rs. 200\$000 per year, payable by each agent, director or manager of a corporation, when the by-laws of the corporation provide for their remuneration. Whenever the president of a corporation receives a higher remuneration than a director, he is subject to a tax of Rs. 200\$000 per annum.

Whenever a corporation engages in the sale or manufacture of merchandise subject to internal revenue taxation, a small additional tax is paid for such operations besides the usual stamp tax upon the articles themselves.

Municipal License.

Domesticated foreign corporations are also subject to the municipal license tax of the Federal district, which is levied according to the amount of capital.

In addition to this tax there is also a sanitary tax of Rs. 5\$000 per month, and various other small taxes such as those for signs.

Duly authorized branches of foreign corporations are not subject to the 5 per cent. Brazilian Government tax on declared dividends. This exemption, however, is a provision of the annual budget law, and there is no insurance that it will be continued indefinitely.

Legal Formalities for Incorporation.

At least seven subscribers are required to organize a Brazilian corporation, and at no time shall the number of stockholders fall below this number for a period of more than six months, under the penalty of automatic dissolution. Corporations may be constituted at a meeting of the subscribers or by public deed.

Before a corporation becomes legally constituted, its entire capital stock must be subscribed. Subscriptions are either public or private, and in the case of public subscriptions, certain formalities must be fulfilled. Any part or even all of the capital stock may consist of real or personal property, or other property rights, the valuation for capitalization purposes being determined by appraisers appointed by the subscribers. The appraisement is left entirely to the discretion of the appraisers. Whenever part of the capital stock consists of property, the corporation can not be considered as legally organized until the appraisers' report has been presented and approved at a special meeting. At this meeting, a call for which must be issued by publication in the newspapers, the by-laws of the corporation are voted upon and the corporation is definitely declared as constituted. Whenever the entire capital stock consists of cash, the complete organization may be effected at one meeting.

No specific authorization of the Brazilian Government is necessary for the incorporation of domestic corporations, except in the case of banks, insurance companies, companies dealing in foodstuffs, and a very limited number of other classes, which are governed by special laws.

A deposit of one-tenth of the declared cash capital must be made in the Federal Treasury or a bank of issue, and the stamp tax equivalent to two-tenths of 1 per cent. of the capital, paid to the Treasury.

The by-laws, certificate of deposit of one-tenth of the capital stock, minutes of the meetings of incorporation, list of shareholders, their residences, and number of shares held, and other documents proving that the legal formalities have been properly complied with, must be filed with the Board of Trade of Rio de Janeiro, or the Board of Trade in the capital of the State where the incorporation takes place. After the by-laws and other documents have been filed with the Board of Trade, they must be published in the Official Gazette. A copy of this publication must be filed with the Registrar of Mortgages.

There is no legal prohibition against the residence of stockholders in foreign countries, but it is generally advised that a majority of the stockholders be resident in Brazil.

There is no legal prohibition preventing corporations in foreign countries from holding stock in a Brazilian corporation.

Whenever a foreign corporation intends to organize a Brazilian corporation, its representative should be given a full and special power of attorney for this purpose. The requirement of at least seven stockholders, however, can not be waived. There is no restriction upon the minimum number of shares which may be held by any one stockholder.

Expenses of Incorporation.

The expenses for initiating operations of Brazilian corporations are identical with those described under domesticated foreign corporations, with the exception of the following:

The stamp tax for decree of authorization is not required for Brazilian corporations, as no special government authority is needed.

The expenses for translation are saved, as the by-laws and other documents of incorporation are prepared in the Portuguese language.

The taxes levied upon domestic Brazilian corporations are the same as those already enumerated under domesticated foreign corporations, with the following exception:

Brazilian corporations are subject to a special tax of 5 per cent. upon declared dividends. Stock dividends are subject to this tax, but a division of a part of the profits to the officers and directors, according to the by-laws of the corporation, are exempt. The tax is therefore, only in a limited sense, an income tax.

NEW FOREIGN ENTERPRISES.

Sao Paulo will soon possess two large modern department stores, according to Brazilian advices. The Mappin States Company has enlarged its quarters and an English and Argentinian Company is reported about to establish a branch in that city.

By decree of September 6, 1918, the Nippon Boyeki Kabushiki Kaisha was authorized to operate in Brazil. Its objects are stated as engaging in general importation and exportation and the sale of Japanese products, including trade in drugs, food-stuffs, toys, and other commodities.

The home office of the company is at Tokyo, Japan, with branches at Kobe, Rio de Janeiro, and Buenos Aires. The total capital of the enterprise is 500,000yen.

By decree of September 25, 1918, the President of Brazil has authorized the Anglo-Brazilian Syndicate to operate in this Republic.

This company was incorporated with head offices in London, England, on May 14, 1918. It has a capital stock of £10,000 (\$48,665), divided into 9,995 shares of £1 each, and 100 shares of one shilling each.

Registration of Trade-Marks.

According to reports received by the United States Bureau of Foreign and Domestic Commerce, there has recently been a systematic registration of American trade-marks and trade names

In Brazil, without the authorization of the owners in the United States. Among the marks so registered have been included also several generic terms not registrable in the United States, and various geographical names, such as "Syracuse". One firm in Rio de Janeiro is reported to have registered since July, 1919, more than 50 American trade-marks, including several widely used in the United States and in the export trade. The Bureau has already sent notices to the owners of these marks in order that they might take steps to have the registrations cancelled. As trade-mark applications are not published in Brazil until the marks have been registered, however, it is usually impossible to enter opposition in time to prevent registration being granted. In addition the Brazilian law permits the first applicant to register any mark, and cancellation of registrations once granted is difficult and expensive. American firms exporting trade-marked goods to Brazil are urged to protect themselves against such fraudulent registration by securing registration of valuable marks in their own names.

PRINCIPAL DEALERS.

The following is a partial list of the most important dealers in Rio de Janeiro:

GENERAL IMPORTERS.

Abel y Co., Rodrigo Silva 86.—Abillo y Co., rua Theophilo Ottoni, No. 66.—G. Affonso y Co., rua 10. de Marco 8.—Domingo Aguiar Mello, rua San Bento 13.—Gustavo Alive, Chile 33.—Alfredo de Alburquerque, rua San Pedro 89.—German Bottoher, rua de Quitanda 183.—Bonniard y Co., rua de Alfandega 92.—M. Caldeiro y Co., rua Theophilo Ottoni 33.—Camacho y Co., rua da Alfandega 65.—Diaz Almeida y Co., rua Julio Cesar 26.—Jorge Dias y Co., rua de Acre 51.

COFFEE EXPORTERS.

Abreia y Co., rua General Pedra 208.—Alegria, rua S. Pedro, 168.—Manuel J. Bessada, rua Visconde do Rio Branco, 16.—Deocleciano Luiz Brito, rua do Senador Pompei 69.—Manuel Joaquin Cerqueira, rua Camerino 108.—Francisco Costa Braza, rua Senador Euzébio 88.—Avelino Domingues Vinhas, rua dos Voluntarios da Patria 260.—Juan Felipe, rua S. Christovao, 225.—Domingos Fernandez de Castro, rua Julio Cesar 52.—Machado y Gomes, rua Tobias Barreto 72.—Joaquin Lacorda, Boulevard 28 de Setembro 255.—Damien Antonio Vieira, rua Frel Caneca 160.

RUBBER EXPORTERS.

M. Castro, rua Ouvidor 132.—Jaime Magnus y Co., rua de San Pedro, 96.—Mario Mayen, rua de Senador Dantas, 38.—Ulises de Oliveira, rua Concalves Dias, 56.—Carlos Rocha y Co., rua Cattete, 56.—Trugoni y Sady, rua Carloca 38.—Ernesto Schnelder, rua General Camara, 37.—Pullen Sherrard y Co., rua Visconde de Imhauna, 82.—Gummuvaaren Vereinigte, rua Hospicio, 29.—Adolfo Wobeken y Krebs, rua Hospicio, 29.

HARDWARE STORES.

Joaquin Antonio de Aguiar, rua General Pedra 148.—Alberto Almeida y Co., Av. Central 99, y rua Rosario 118.—Francisco R. Bracellos y Co., rua Elias de Silva, 97.—Barata y Manjano, Praça de Republica, 17.—Arturo Candido Cardoso, rua Capitao Salomio, 116.—Enrique Francisco Canejo, rua Capitao Salomao, 45.—Garcia Diaz y Co., rua General Camara, 41-43.—Pereira Fernandes, rua de Boa

Vista, 11-B.—Clemente Jose Gomez, rua Passagem de Gado, 14.—Arlindo Martins, rua San Pedro, 166.—Jeronimo Mendez, rua San Christovao, 203.

FURNITURE STORES.

Juan Alves Pontes, rua de Alfandega, 135 y San Pedro, 131.—Manuel de Azevedo, rua Senhor dos Passos, 47.—Soares Baptista, rua Assembleia, 17.—Godorredo G. Barbosa, rua Dr. Menezes Vieira, 17.—Archanjo Camponello, rua Visconde de Itauna, 149.—José Cayetano Cardoso, rua de Conde de Bonfin, 65.—Francisco Carlos, rua de S. Christovao, 208.—José Correa Coelho, rua Senador Euzebio 30.—José F. Couto, rua San Luis Gonzaga, 20.—Francisco Dias da Costa, rua do Lavradio 131.—Antonio Augusto Fernandez, rua da Alfandega, 228.

SEWING MACHINES.

F. Andrade, rua Uruguayana, 106.—Lopez Belizzi y Co., rua Vasco da Gama, 158.—Manuel da Costa Menezes, rua San Clemente, 2.—Severo Duarte y Co., rua 7 de Setembro, 41.—M. Fragoso y Co., rua General Camara, 157.—Neves Gomez y Co., rua 7 de Setembro, 161.—M. Machado y Co., rua Uruguayana, 87.—Federico Otte, rua Coronel Moreira Cesar, 131.—Francisco Ramos y Co., rua Visconde de Itauna, 23.—Eusebio da Rocha, rua Sousa Franco, 3.—L. Simoes, rua de Chile, 1.

TYPEWRITER MACHINES.

A. Campos y Co., Casa Standard, rua do Ouvidor, 93 y 95.—Continental, San Pedro, 47.—Severo Dantas y Co., rua 7 de Setembro, 41.—J. M. Lopes, rua Merechel Floriano Peixoto, 41 y 43.—Wilson y Maura, rua 7 de Marco, 53.—Federico Ottil, rua Ouvidor, 131.—Eusebio da Rocha, rua Sosa Franco, 3.—Alfredo Schlick y Co., rua da Quitanda, 48.—Gabriel Soares y Co., Av. Central, 119.—Bertoldo Wachneidt, Av. Rio Branco, 50.

PERFUMES.

Felipe M. Batuli, rua S. Francisco de Prainha, 53.—C. Bazin y Co., Av. Rio Branco, 134.—Julio Berto Cirio, Rua da Alfandega, 134.—Sebastian Campos y Co., Rua do Theatro, 9.—J. Fernandez de Araujo, Largo S. Francisco de Paula, 4.—Carlos A. Ferreira y Co., rua Andradas, 12.—A. Loureiro, rua Uruguayana, 100.—M. de Mello, Travessa S. Francisco de Paula, 28.—Augusto Rodriguez Horta, rua de Setembro, 123.

TAILORING.

Mauricio Abiteboul, rua de Saude, 325.—Elias Abrahao, rua Constitucional, 84.—A. J. de Abreu y Co., rua Lapa, 44.—F. Alfonso, Mercado Municipal, 87 y 80.—Alfonso Almeida, rua Teniente Coronel Agostinhos, 19.—Augusto de Almeida y Co., rua Assembleia, 119.—Alvarez y Alvarez, rua de Areal, 105.—Abilio José de Andrade, rua D. Manuel, 14.—Costa Acevedo y Co., rua Uruguayana, 93.—Pedro Abelino Barbosa, rua Frei Caneca, 173.

HATTERS.

M. Abdalla Curl, Boulevard 28 de Setembro, 306.—Gonzalez y Albino, rua Hospicio, 131.—Rabello Almeida y Co., rua Uruguayana, 94 y 96.—Bernardino Alves de Fonseca, rua Marechal Floriano Peixoto, 26.—Vicente Barcellos, Praça Eugenio Novo, 36.—Augusto Careja, Casa Natal, rua da Marioca, 63.—C. Castro y Hno., rua Sete de Setembro, 112.—Campos Costa y Mendoza, rua Mercado, 7.—I. M. Costa y Co., Casa Ouvidor, rua Uruguayana, 86.—Miguel Gomes Oliva, rua Dr. Felipe Cardoso, 2.

MILLINERS.

Almeida Castello y Co., rua Assembleia, 119.—M. Calbasar, rua Rosario, 171.—Maria Campos, rua Uruguayana, 22.—Vda. de Pablo de Castro, rua Sousa Franco, 19.—Maria Magra, rua Ouvidor, 144.—R. Duarte y Co., Rua Sete de Setembro, 191.—Gustavo y Co., rua

General Camara, 163.—Ramiro Pereira de Castro, rua Uruguayana, 11.—R. S. Vargas y Co., rua Sete de Setembro, 138.

IRON.

Justino Alegria y Co., rua S. Pedro, 326.—Arens y Co., Av. Rio Branco, 20, y rua Municipal, 4.—D. F. de Acevedo, rua da Riachuelo, 359.—A. Correa y Co., rua Senador Euzebio, 40.—A. Correa y Co., rua Theophilo Ottoni, 62-64.—Pinto Concalves y Co., rua Alfandega, 105.—Farinha Carvalho y Co., rua Camerino, 150.—Münich y Co., rua General Camara, 120.—Carlos Wicc, rua San Pedro 52, 1o. andar.—C. Rocha y Co., rua dos Ourives, 113.

JEWELRY.

Humberto Adamo, rua do Ouvidor, 98.—J. Alberto, rua dos Ourives, 42.—J. Almeida de Sousa, rua Visconde Rio Branco, 23.—Manuel Alonso Collele, rua General Pedra, 32.—J. B. Alves y Co., rua Praça Tiradentes, 74.—L. Alves Rento, rua Visconde do Rio Branco, 23.—Mario Albes, Acre, 104.—Albino Barbosa de Almeida, rua Haddock Lobo, 3.—Alfredo J. Avila, Pr. Tiradentes, 16.—Francisco Canacio, Praça Tiradentes, 32.

TOYS.

R. Abramants, rua Carioca, 34.—Alves Cases y Cabral, rua 1o. de Marco, 2.—Castro y Cruceiro, rua Goncalves Diaz, 62.—Estella y Co., rua Coronel Moreira Cesar, 96.—Constantino Graca, rua Goncalves Diaz, 60.—José Enrique Mattos, Travessa S. Francisco Paula, 24.—Fernandez G. da Rocha, rua Praça Duque de Caxias, 29.—Cesar Diego, rua de Quitanda, 16.—A. O. Torre, rua Vizconde Rio Branco, 60.

BOOK DEALERS.

A. de Castillo y Co., rua S. José, 114.—American Bible Society, rua Quitanda, 47.—A. de Acevedo y Costa, rua Uruguayana, 29.—Bittencourt y Co., Avé Passos, 94.—F. Briguet y Co., rua Sachet, 23.—Luis Macedo, Rua Quitanda, 74.—Machado y Co., Av. Passos, 25.—Juan Martins Ribeiro, rua General Camara, 345.—J. Ribeiro dos Santos, rua S. José, 82.—Jacinto Silva, rua Rodrigo Silva, 7.

CUSTOM HOUSE AGENTS.

Carlos Joaquin de Almeida, rua Vizconde de Itaborahy, 41, sobr.—Fernando Alves de Carvalho, Jr., Armazen. 6, Alfandega.—Luis de Andrade Baptista, rua Vizconde de Itaborahy, 97, sobr.—José de Araujo Matta, Praia Flamengo, 384.—Antonio Carlos Barbosa, rua Vizconde de Itaborahy, 35, sobr.—A. Bastos, rua General Camara, 19.—Belli y Co., rua San José, 16.—Francisco Brwn, rua Adelaide, 45.—Segundo Causa, rua 1o. de Marco, 66.

AUTOMOBILES.

Alfredo Elisario de Silva, rua Caranjerias, 530, M. F. Aguiar y Co., rua Assembleia, 45.—Joaquin Amorin, Junior, rua Rosario, 103, sobr.—Jaime Antunes Leite, rua Vizconde de Inhauma, 32.—G. Bancho y Co., rua Vizconde de Inhauma, 32.—Irmão y Baptista, rua Ferreira Vianna, 71.—Bilbao y Co., rua Cattete, 249; Adelino Marques, rua Ricachuelo, 172.—Alfredo Meyer, rua dos Ourives, 43.—Irmão y Moraes, Aven. Rio Branco, 137.

SHIRTSTORES.

Rabello Almeida, rua Uruguayana, 94 y 96.—Luis José Alves, rua do Hospício, 108.—Andrade Santos y Co., rua Senador Euzebio, 128.—Candido de Araujo Vianna, rua Sete de Setembro, 155.—Castro Lopez y Brandao, Praça Tiradentes, 2.—Cesar y Coutinho, rua Adoch, Lobo, 408.—Juan D'Almendra, rua Vizconde de Inhauma, 64.—Cesar Bautista Diniz y Co., rua da Carioca, 78.—Raul Fonseca, Alianca, rua Sousa Franco, 5.—Ernesto Gomez de Costa y Co., rua Marechal Floriano Peixoto, 56.

FURS, SKINS AND LEATHERS.

Jorge y Bastos, rua General Camara, 141.—Antonio Bordallo y Co., rua Sete de Setembro, 69.—Cardoso de Cerqueira y Co., Sete de Setembro, 113.—José da Cruz Serma, rua da Hospício, 86.—Esteves y Co., rua General Camara, 134.—Plácido Faria y Co., rua Hospício 64.—Enrique Perreira y Co., rua General Camara, 209.—Gil Riveiro y Co., rua Assembleia, 64 y 66.—Carneiro Colcalves y Co., rua Sete de Setembro, 73.

DRUGGISTS.

Jollo Almeida y Co., rua D. Pedro, 94.—Alloti y Co., rua Alfândega, 159.—André Sete de Setembro, 39.—Freltas Araujo y Co., rua dos Ourives, 88.—A. Araujo y Co., rua Quintanda, 67.—Malmo y Araujo, rua S. Pedro, 82.—Gaspar Avila y Co., rua Andradás, 91.—J. Andrada y Co., rua dos Andradás, 49.—Acebedo, rua da Assambleia, 73.

SAO PAULO.

The following is a partial list of the most important dealers in Sao Paulo:

CHEMICALS.

Baruel y Co., rua Direita, 3.—Braullo y Co., rua S. Bento, 26.—Figuereido y Co., rua Alvares Penteado, 6.—Ribeiro y Laves, rua Direita, 57.—Leao, rua de S. Bento.—J. Lima, rua Sta. Thereza, 8.—L. Queiroz y Co., rua 15 de Novembro, 32.—J. Santos y Co., rua S. Bento, 74.—Soares y Co., rua Direita, 11.

DRUGGISTS.

Ramiro de Araujo, rua Vergueiro, 125.—A. Ascoli, rua de Liberdade, 10.—Assis, rua 15 de Novembro.—Orestes y Assis, rua Maua, 117.—Emanuel y Bianculli, Av. Rangel Pestana, 112.—Carlos Cruz, Travessa do Braz, 5.—Luis Pinto, rua D. Falcao, 30.—Santa Teresa, rua Sta. Thereza.—J. Santos y Co., rua S. Bento, 74.—Francisco Samo, rua S. Joao, 50.

HARDWARE STORES.

Silva Almeida, rua General Carneiro, 13.—Allema, rua de S. Bento, 68.—Leite & Co., rua Alvares Penteado, 31.—Goncalvez Rollin & Co., rua General Carneiro, 35.—Irmão & Thomas, rua do Theouro, 15.

JEWELRY.

Casa Bento Loch, rua 15 do Novembro, 57.—Casa Birle, rua Direita, 28.—Casa Brandt, rua 15 de Novembro, 53.—Casa Enrique, rua 15 de Novembro, 18.—Casa Michel, rua 15 de Novembro, 27.—Casa Netter, rua 15 de Novembro, 48.—Casa Nico, rua 15 de Novembro, 33.—Casa Pastore, rua General Carneiro.—Raphel y José Conte, rua San Bento, 23.—Paul Levy & Co., rua 15 de Novembro, 43.

TOYS.

Grande, Bazar Parisien, rua de S. Bento, 91.—Bazar, 15 de Novembro 6-A.—Casa Edison, rua 15 de Novembro, 55.—Casa Libre, rua Direita, 2.—C. Gallino, rua de Carmo, 39.—V. M. Genin, rua 15 de Novembro, 8-A.—R. Sarafana, rua S. Bento 41-A.

BOOK DEALERS.

Francisco Alves & Co., rua S. Bento, 65.—C. Bastos & Co., rua Barao de Itapetininga, 46.—J. P. Cardoso, Av. Rangel Pestana, 109-B.—C. M. Gordon, rua S. Ephigenia, 77.—Pablo Cornado, Av. Rangel Pestana, 109-B.—H. Grobel, rua Florenciano de Abreo, 102.—C. Hildebrand & Co., rua 15 de Novembro, 40.—J. A. da Silva, rua Sebastiao Pereira, 18.—Martin Solé, Av. Rangel Pestana, 244.—C. Texeira, rua S. Joao, 8.

FURNITURE.

Angelo Bolobnesi, rua S. Joao, 143.—Vicente Collado, rua S. Joao, 66.—J. C. Costa, rua Floriano Peixoto, 3.—A. Moraes & Co., rua José Bonifacio, 7.—Campos Moreira & Co., rua M. Deodoro, 8.—José Refinetti y Irmaos, Av. Rangel Pestana, 100.—Progrida Sao Paulo, rua Seminario, 57.—Francisco Schulz, rua do Seminario, 32.—Angelo Tastaldi y Filho, rua S. Joao, 120.—Nicolau Tessuto y Irmao, rua S. Joao, 132-A.

WATCHES.

Eduardo Amatucci y Co., rua 13 de Novembro, 1-B.—Birle y Co., rua Direita, 28.—Rafael Cassacia, Ladeira de S. Joao, 7.—José y Raphael Conte, rua de S. Bento, 23.—Frederico Glanz, rua Direita, 42.—B. Loeb y Co., rua 15 de Novembro, 57.—Carlos Massetti y Co., Ladeira Sta. Iphigenia, 1.—Vicente Mazzola, rua Sta. Iphigenia, 128.—Pastore Irmaos, rua General Carneiro.—Angelo Persegani, rua de Seminario, 9.

TAILORING.

Mario F. Alcide, rua Barao de Itapetininga, 56.—Freundenberg y Armando, rua Direita, 45.—Vicente Barbosa y Co., rua 15 de Novembro, 1-B.—Smillare y Barone, rua 15 de Novembro.—José Cardoso, rua G. Osorio, 28.—F. Casella, Travessa do Commercio, 11.—Bandeira y Castro, rua do Seminario, 22.—A. Ferrari, Av. Rangel Pestana, 139.—Ferraz y Co., rua M. Deodoro, 18-A.—Carvalho Gomes y Co., Av. Rangel Pestana, 238.

HATTERS.

J. Filhos y Bossio, rua 21 de Abril, 40.—Irmao y Cervone, rua Anhaia, 31.—Giuseppe Falcone, rua General Carneiro.—Domingos Ferrigno y Co., rua General Carneiro, 40.—Ernesto Ferroni, Av. Rangel Pestana, 211.—Angelo Forte, rua de Seminario, 10.—Pepe Serricchio y Co., rua General Jardim.—Pereira Sousa y Co., rua Alvares Penteado, 28.—J. P. Villela y Co., rua Anhangabahu, 37.—M. Villela y Co., rua Direita, 29.

DRY GOODS.

Combacau y Co., rua C. Cotegipe, 48.—Companhia de Fiancao e Tecidos, rua S. Bento, 10.—Companhia Industrial, S. Paulo, rua Paula Sousa, 30.—Companhia Nacional de Tecidos de Juta, rua Direita, 14.—Companhia Paulista de Anlagens, rua de S. Bento, 51.—Mariangela, rua Monsenhor Andrade.—Raulinson Muller y Co., rua S. Bento, 17.

HARDWARE.

Joaquin Ferreira de Queiroz, rua General Osorio.—Juan Jorge Figueiredo y Co., Godofredo Geiser, rua Baron de Jaguará, 11.—Francisco Moitinho, rua Baron de Jaguará, 39.

SHIRTS.

L. A. Correa, Praca da Republica, 14.—Miguel Klann y Co., rua S. Antonio, 59.—Irmao e Maufal, rua General Camara, 104.—A. Schamas, rua 15 de Novembro, 37.—Marqués y Texeira, rua 15 de Novembro, 86.

CHILE.

The Republic of Chile is one of the most important South American countries. Although not one of the largest and most populated, its capacity for production and its development are remarkable.

It covers an area a little larger than that of the South Atlantic States, but its population is a little over one third of that of the same group of States, the density of population of Chile being about that of California. Some provinces, however, are thickly populated.

The Republic is divided into 23 provinces, subdivided into 82 Departments and 1 Territory.

The area and population, as officially given on January, 1917, are:

Provinces	Area sq. miles	Pop.	Pop. per sq. mile
Tacna	8,999	38,126	4.68
Tarapaca	16,689	132,621	7.64
Antofagasta	46,408	205,662	4.43
Atacama	30,711	63,898	2.08
Conquimbo	14,098	189,507	13.44
Aconcagua	6,406	131,354	24.29
Valparaiso	1,775	340,347	191.94
Santiago	5,893	616,316	104.58
O'Higgins	1,168	120,750	55.69
Colchagua	3,851	162,966	42.31
Curicó	3,045	114,671	37.65
Talca	3,864	131,058	33.91
Maule	2,812	110,288	39.30
Linares	3,969	125,821	28.98
Nuble	3,498	195,302	55.83
Concepción	3,313	265,362	80.09
Arauco	2,189	73,260	33.47
Bio Bio	5,353	105,620	19.73
Malleco	3,303	133,212	40.33
Cautín	6,381	161,477	25.30
Valdivia	8,991	178,589	19.85
Llanquihué	34,778	148,214	4.17
Chiloé	6,979	97,941	14.03
Magallanes Territory	65,355	30,623	0.47
Total	289,829	3,870,002	13.35

According to the census of 1885 the population numbered 2,527,300; in 1895, 2,712,145, and in the last census (1907), 3,249,279, of which 1,624,279 were males and 1,625,058 females. In 1916, the population was estimated at 3,789,864.

In 1916 the population of the principal towns was: Santiago, 397,550; Valparaiso, 201,507; Concepción, 68,902; Iquique, 45,502; Talca, 41,618; Chillan, 38,543; Antofagasta, 56,-

216; Vina del Mar, 16,118; Talcahuano, 21,896; Valdivia, 23,460. The Indian inhabitants are of three branches: the Fuegians, mostly nomadic, living in or near Tierra del Fuego; the Araucans (101,118) in the valleys or on the western slopes of the Andes; and the Changos, who inhabit the northern coast region and work as laborers.

On December 12, 1918, the law of domicile referring to the admission and expulsion of foreigners was promulgated. Entrance is prohibited of foreigners who have been sentenced or who are being prosecuted for offenses classified in Chile as crimes; of foreigners who do not have a profession or regular lawful occupation; of those suffering from contagious diseases, or who practice or teach the overthrow by violence of the established political order; or who advocate doctrines incompatible with national unity; or who incite manifestations contrary to the established order, and of those who engage in acts contrary to good custom and public order. The governors of the provinces are expressly authorized to expel from the country any foreigners comprised in the foregoing clauses through decrees issued in accordance with this law. Any foreigner whose expulsion has been decreed may judicially appeal, either personally or through a representative, to the supreme court within five days after the publication of the decree of expulsion. The supreme court, acting as a jury, will decide the appeal within 10 days after its presentation. The administrative authority may compel foreigners to register in special records and to obtain identification cards.

The foreign element in Chile is of comparatively small importance; the last census (1917) showed 134,524 inhabitants of foreign birth, of which 50,000 were Peruvians and Bolivians. There were 10,734 German-born, but this figure does not represent the actual weight of German influence, because the German colony around Valdivia, although founded about 1850, has largely retained the German language, customs, etc.

The Republic of Chile extends from the Samu River to Cape Horn, occupying a long narrow strip of land between the Andine mountain range and the Pacific Ocean, with a width varying from 100 to 248 miles, and a coast line of 2,629 miles. The country can be divided into four perfectly outlined zones:

First Zone, Desert from 18° to 27°, south latitude, in which the nitrate deposits are found. There is scarcely any rain, and streams are infrequent, thus vegetation is confined to certain small valleys in which irrigation is practiced.

Second Zone, Mineral, from 27° to 33°, having such minerals as gold, silver, copper, cobalt, lead, iron, and magnesium. The Andes reach their highest point in this region. Vineyards are cultivated, and some little vegetation is met.

Third Zone, Agricultural, from 33° to 42°, also known as the Central Zone. The Andean range gradually diminishes in height, until it reaches one-third the altitude of the second zone. There are volcanoes, but mostly extinct. There is an

exceedingly fertile valley known as the Central Valley of Chile, located between the Andes and the coast mountain range. This valley is crossed and watered by numerous rivers flowing from east to west, some of which are navigable, and others, on account of their rapid course, can be utilized for the development of water power.

The climate is temperate; rain is abundant, and the soil is so fertile, as to give to the country the name of the Garden of Chile. There are also large forest areas and mines, and mineral deposits.

Fourth Zone, Inland, from 42° to 46°, where the central valley falls away and the coast range is transformed into a vast archipelago, extending along the coast as far south as Cape Horn. It includes the province (island) of Chiloé and the mainland, with Patagonia and Tierra del Fuego. There are abundant rains, immense forests, and good pasture lands for cattle and sheep. The coast offers a good fishing region.

There are several islands belonging to Chile, some distance from the mainland. Among these is Juan Fernández.

POLITICAL ORGANIZATION.

Chile, by the Constitution adopted May 25, 1833, has a republican form of government, with legislative, executive, and judicial branches. The legislative power is vested in the National Congress, consisting of a Senate and Chamber of Deputies, the former in accordance with the new census, will be composed of 37 and the latter of 118 members. Senators are elected for a term of six years, in the proportion of 1 for every 3 deputies, but the Senate is partially renewed every three years. Deputies are elected for three years by direct vote, 1 for every 30,000 inhabitants or fraction thereof not less than 15,000. All male Chileans of 21 years of age who can read and write and are registered, are entitled to vote. Congress meets annually from June 1 to September 1 each year at the capital, Santiago. A permanent committee consisting of 14 members of which 7 are senators and 7 deputies acts for Congress during the recess of that body, and is consulted by the President upon all matters of importance.

The President is elected for a term of five years by electors, who, in their turn, are chosen by direct vote. He cannot serve for two consecutive terms, and may not leave the country during his term of office or for one year after its expiration except with the consent of the Congress. His salary is 60,000 pesos (about \$13,000) a year. A council of State, consisting of 11 members, 6 of which are appointed by Congress and 5 by the President, assist him. He is also assisted by a cabinet of 6 ministers, who are appointed by him but are responsible to Congress.

The Department of Interior (Ministerio del Interior), has under its jurisdiction the government as well as the various intendencies and governors of the territorial divisions. It has charge of the postal and telegraph offices, bureau of statistics, police, charity, and sanitary institutions.

All diplomatic and consular intercourse as well as negotiations with foreign Governments are under the direction of the Department of Foreign Affairs, Worship and Colonization (Ministerio de Relaciones Exteriores, Culto y Colonización). The official churches maintained by the Government are in charge of the division of worship, and the colonization section seeks to promote immigration and colonization into the country. It is also charged with the establishment of propaganda agencies in such places as it deems advisable.

The Judiciary consists of a national supreme court of 10 members, convening at Santiago, six courts of appeal and minor courts.

The provinces are governed by intendents appointed by the President, while the departments are governed by governors. The popular element is represented by municipal councils elected by direct vote in each municipality.

PERSONNEL OF THE GOVERNMENT.

Chile has been under a parliamentary system of government; that is to say Congress has actual control of the cabinet, since it has the power to force it out of office, and congressional assent is necessary for the appointment of its members. Therefore, changes in the personnel of the government are very frequent. It is an exceptionally strong cabinet which remains in power for a whole year.

The following cabinet was appointed and ratified by Congress on Nov. 25, 1919, but according to the belief expressed by the newspaper in Santiago, it was not expected to be in power for many months:

Premier, and Secretary of Interior, Armando Quesada.

Secretary of Foreign Affairs, Cults and Colonization, Luis Barros Borgoña.

Secretary of Finance, Luis Claro Solar.

Secretary of Industries, Public Works and Railroads, Vicente Adrian.

Secretary of Justice and Public Instruction, Luis Artaga Luco.

Secretary of War and Marine, Enrique Bermudez.

On March 28, 1919 an ad referendum treaty between Chile and Great Britain for the establishment of a peace commission, charged with solving such disputes as may arise between the two countries which cannot be settled diplomatically, was signed in Santiago.

WEALTH IN NITRATE.

In 1830, the first year of the nitrate industry in Chile, the nitrate fields exported only about 85,000 quintals of crude material, and in 1913, the export amounted to about 60,000,000 quintals. According to estimates there is a visible supply of the nitrate mineral, allowing for increased consumption, for at least the next 100 years.

The nitrate or saltpeter zone stretches over an area of about 450 miles in the north of Chile, from one end to the other.

The deposits of the mineral do not lie close to the coast, but are separated from the sea by a distance varying from 15 to 93 miles, and they are always at an altitude of from 3,600 to 13,000 feet, in a barren and waterless plain. The climate in this region is delightful but vegetation is absent, although nitrate forms one of the chief food ingredients of all plant life. Many well-known Chilean ports are on this strip of coast from which the shipment of nitrate is almost the sole activity: Pasagua, Junin, Iquique, Antofagasta, Taltal, and Caldera.

Nitrate of soda or saltpeter, is found mixed with other substances, but a commercial profit is obtained from the crude deposits if the proportion is 30 per cent. or above, and according to the claims of some advanced chemists, even as low as 7 per cent. The beds contain four layers of material, the next lowest being that of the nitrate itself. Above this are the *chucas* on the surface, which is nothing more than the accumulation of ages; the *costra* beneath, a harder and older mass, but still a somewhat worthless débris, the *caliche*, the real nitrate of soda; and finally, the stratum of bed rock called *gova*. To obtain the nitrate a shaft is sunk to the *gova*, into which powder is placed and exploded; the overlying mass is thrown up and the *caliche* containing the nitrate scattered on the ground. Then this is collected and taken to the refining works, called "*oficinas*," for preparation into refined and almost pure nitrate of soda, ready for export.

Machinery of the most economical and effective pattern is used in the *oficinas*, and the methods of refining the *caliche* are according to the best researches of industrial chemistry. This is also true of the facilities for transportation to the steamer. Many small but well-equipped railways are in operation in the fields, and they carry the finished product to the coast towns, from which they are finally shipped abroad.

The production of nitrate in Chile in 1918 amounted to 62,000,000 quintals, while the exports aggregated 64,000,000 quintals.

THE NITRATE SITUATION.

Seventy-five per cent. of Chile's exports come out of her incomparable fields of nitrate of soda. Some of this is represented by the refined nitrate. A less important but still valuable item is iodine, extracted from the same deposits. She also exports forty or fifty thousand tons yearly of borate of lime.

The great nitrate industry has brought enormous sums into Chilean hands, it has helped to build up a large and thriving working class, and has been one of the greatest factors in bringing Chile into the front rank of South American countries.

Immediately after the signing of the armistice, the nitrate industry suffered intensely because the demand for this product, which had been used for the manufacture of explosives, practically ceased. The shipping conditions made shipping very difficult and the nitrate industry suffered intensely. The crisis came at the beginning of 1919. The Minister of Finance presented to Congress a law to promote nitrate industry, and stated

that the allied committee had declared it would make no new purchases. Therefore, the nitrate situation became grave. The minister's bill proposed the appropriation of £1,200,000 to be used to purchase nitrate on Government account, enabling works, which had practically ceased, to resume operations. A 40 per cent. export duty was planned, to be imposed upon works which do not associate themselves with the Government plan.

In view of the situation, the producers organized, in the form of an association, on January 10, 1919. Ninety-five per cent. of production power of 1918, which leaves out the German works, was represented. Eighty-three per cent. voted for the association proposition.

The December exports for the year 1917 were 5,146,946 Spanish quintals; for December, 1918, they were 3,355,235 quintals, showing a decrease of 1,791,711 quintals. The production in December, 1917, amounted to 5,812,597 quintals, whereas in December, 1918, it reached only 5,400,855 quintals, showing a difference of 411,742 quintals in favor of December, 1917, production.

The labor situation became acute, and thousands of laborers were thrown out of employment. The Government handled the situation most intelligently, and gave every facility to the workmen. Stores were established, where first necessities were sold at cost. Thousands were sent to southern Chile at Government expense to work on the farms there.

Recently the Chilean Government offered to purchase the 1919 nitrate production, paying 13s. 2d. per quintal. There are several obstacles to such a scheme—chiefly inability to store and protect the large stocks and the consequent cost of transportation, etc., but it becomes necessary, some such plan will probably be agreed upon. Nitrate men, however, are hopeful of the situation and expect a normal demand to return in the course of five or six months.

Reports published in August, 1919, showed that the production of nitrate was less than half of what it was a year before, and only 56 out of 114 oficinas were in operation.

The Chilean Association of Nitrate Products was trying at that time to hold up the price of nitrate to 10s. 1d. per quintal f. a. s. in Chilean ports for the ordinary or 95 per cent. nitrate, and 10s. 4d. for the refined nitrate. However, some small sales were made by outside sellers at 8s. 11d. per quintal for the ordinary and 9s. 1d. per quintal for some 96.1 per cent. nitrate.

The stocks of nitrate on hand at that time, and ready for shipment amounted to about 34,000,000 quintals, and the amount on hand in August, 1918 was only 20,000,000 quintals. As the stocks on hand were large the production was being greatly reduced until shipments increased. The production for the first seven months of 1919 was only 22,000,000 quintals compared with 37,000,000 quintals for the corresponding months of 1918.

Information published late in September, 1919, revealed the fact that the situation was normalizing at a rapid pace. During the months of August and September important nitrate firms

resumed work, and others prepared to put their machinery in operation. The entry of the *Compañía de Salitres de Antofagasta* in the association of producers, and the adhesion thereto of the German company, showed encouraging prospects of an early revival in the industry to normal production.

The announcement that the United States would permit the importation of Chilean nitrates brought about an immediate improvement in commercial and industrial conditions in that country. The establishment of new steamship lines, giving Chile direct connections with both Italy and Sweden, has helped the situation, the movement abroad of the chief product of the northern deserts having already affected favorably the international price of the Chilean dollar.

The Government of Chile has contracted to furnish 200,000 metric quintals of nitrate to the Government of Holland at 13 1/2 shillings per metric quintal. Holland is to supply the ships for transportation, which will bear cargoes of rice, tea, coffee, sugar, and other products to merchants of Mejillones.

The members of the Nitrate Producer's Association, reports that the sale of nitrate since the organization was formed to October 2, 1919, aggregated 18,688,000 quintals, and that the monthly delivery from October, 1919, to March, 1920, would be 750,000 tons.

The small island, Chimba, situated north of the port of Antofagasta, and a necessary part of the adjacent beach, has been leased by the Government to a private concern for the construction of a harbor to be used exclusively in the loading of nitrate, the concessionnaire agreeing, among other things, to establish a branch railway line connecting the island with the Antofagasta-Bolivia Railway line.

COAL.

The next most important mineral industry of Chile is coal mining. The product of the national deposits, however, does not meet the country's demand for coal, yet it is, as yet, the only country in South America in which coal is commercially mined with regularity, and therefore able to supply local consumers directly.

The Chilean coal fields extend along or near the coast from 35° south latitude into the Magellanic lands, the most important mines being at Coronel, Lota, Curanilahue, and Lebu. In addition to these more important deposits, small fields, known as the Penco deposits, occur north of the Bay of Arauco in the bays of Coluimo and Talcahuano. There are also mines near Punta Arenas producing an inferior grade of lignite.

The mines at Coronel and Lota are owned by the Schwager Coal Co. and the Lota and Coronel Co., both Chilean concerns. These mines have workings below the sea in horizontal veins 1,200 to 1,400 meters from shore. The amount of coal in sight for the future in these mines is estimated to be not less than 39,600,000 tons. The mines at Curanilahue are owned by the *Compañía de los Ríos de Curanilahue*, a Chilean company,

and, the Compañía de Arauco (Ltda.), a British concern. This field is reported to be the most extensive one in Chile, but has not been developed. The reserve is calculated to be 120,000,000 tons. The principal mines in the Penco district are the Cerro Verde, the Lirquen, and the Rosal. The coals of this district differ from the others of Chile in that they are more friable and produce pulverulent coke. The mines at the mouth of the Lebu River are said to be the oldest in Chile, but they have been difficult to develop because of the poor condition of the port of Lebu. These mines are the Errazuria, owned by the Compañía Curanilahue, and the Millaneco, now closed, and others belonging to the Compañía Victoria de Lebu.

The profits of the largest coal-mining companies have increased considerably.

The following is the list of the coal mines registered in Chile and the owner of each mine:

Lirquen, Cía. Carbonífera de Lirquen; El Rosal, Cía. Carbonífera de El Rosal; Lota, Cía. de Lota y Coronel; Buen Retiro, Cía. de Lota y Coronel; Coronel, Cía. de Lota y Coronel; Playa Negra, Cía. de Lota y Coronel; Schwager, Cía. Carbonífera y de Fundición Schwager; Chiflon y Nivel, Cía. Carbonífera Los Ríos de Curanilahue; Victoria, Cía. Carbonífera Victoria de Lebu; Colico, Cía. de Arauco (Ltda.); Curanilahue, Cía. de Arauco (Ltda.); Amalia, Cía. Carbonífera Los Ríos de Curanilahue; Isabel, Sociedad Carbonífera de Mafil; Porvenir, Comunidad Minas de Carbón Porvenir; Loreto, Menéndez, Behety y Cía.

Several new coal deposits have been found in southern Chile. The first is near La Unión. The quality of the coal is considered to be very good and machinery is being installed for the exploitation of the deposit. It is estimated that 40,000,000 tons can be extracted, and a special railway is being built to Rapallo station.

Another coal deposit has been found in the Department of Castro. The analysis of coal taken from the outcrop showed a residue of 9 to 10 per cent. of ash. The greater part of the coal field is on the beach, in the northern part of Castro Bay, and opposite the town of the same name. There are nine deposits in all. The coal from this region is different from that which comes from other parts of Chile, and is not unlike boghead or cannel coal. The coal mines on the island of Chiloé are being exploited and within a short time exploitation on a large scale will begin.

Coal has also been found at a place called Mallef, 6 miles from the Central Railway Station of Valdivia. Its exploitation has been started, but little has been achieved so far because of bad roads and poor means of transport.

A rich coal deposit has been discovered about 10 kilometers from the station of the Bolivian Central Railway. Coal is now being extracted from this deposit.

The annual consumption of coal in the country is reckoned at 2,500,000 tons in the following proportions: Nitrate industry and its railroads, 800,000 tons; government railroads, 500,000; privately owned railroads, 50,000; shipping, 450,000; mining and

metal industries, 150,000; gas plant, 300,000; varied industries, 300,000; and domestic uses, 130,000 tons. Chile's present output of coal is 1,800,000 tons annually, making it necessary to import sufficient to supply the demand.

Before the war little American coal had been introduced into the Chilean market, but during the war Chile turned to the United States to supply the fuel which could not be obtained from England. American coal and oil were successfully substituted for British coal, and a demand was established. The advantage afforded by the Panama Canal route enables American exporters to obtain freight rates on coal sufficiently low to compete with those from Liverpool.

Under normal conditions Chile affords the most important fuel market on the west coast of South America. During 1913, the last year before coal exports from Europe were restricted, Chile's consumption of coal was more than 2,800,000 metric tons, about 55 per cent. of which was imported. Great Britain supplied about three-fifths of this amount; the Australian trade was increasing in volume; the United States supplied only a small portion of the total. The period of the war was characterized by a decrease in total coal imports and by a shifting of the chief source of supply from Great Britain to the United States. By 1917 the relative positions of the two countries had been reversed, and the United States was supplying more than 60 per cent. of the total imports.

Crude petroleum, the use of which dates from the comparatively recent introduction of the Diesel engine into the nitrate and mining districts, is imported principally from the United States. During the normal year of 1913, the consumption amounted to approximately 400,000 metric tons, all of which was imported, but during the war oil was substituted for coal wherever possible, and consequently imports increased until in 1917 they amounted to more than 750,000 metric tons. The United States remained the chief source of supply until that time when petroleum was sent from Mexico, on account of the restrictions imposed by the war.

SULPHUR.

The sulphur industry of Chile dates back to the early days of the nitrate workings about 100 years ago, as the sulphur required for the manufacture of the blasting powder needed to break up the nitrate ground has been supplied from the native sulphur deposits from the beginning of the nitrate industry. Those deposits lying directly east of the nitrate fields and closest at hand have been the ones worked to supply the necessary sulphur which was taken to the nitrate oficinas on the backs of pack mules.

The quantity of sulphur available in the Tacora region has not been determined; but it is certainly large, and the production can be greatly increased. Whether this is done or not will no doubt depend almost entirely upon whether it is able to compete in foreign markets with the sulphur from the United

States and Japan. The outlook is promising. Some of the people interested in the district are looking for North American capital to develop properly the region.

In January, 1916, there were 605 sulphur-mining claims, scattered throughout various sections of the Republic. The deposits yielded 9,769 tons during 1915, valued at \$422,021 United States currency, and a considerably larger amount during 1916. In 1913 the production was valued at \$280,640 United States currency.

The largest sulphur-producing mine is the Buena Ventura, owned by J. S. Concha and located near Ollague at the foot of Mount Ollague, a live volcano, on the main line of the Antofagasta & Bolivia Railway. The various sulphur mines of Chile and their owners, are:

Ollague (Buena Ventura), owned by J. S. Concha; Tacora, by A. Dondero; Villa Industrial, by Espado Bros.; Chupiquina, by Muecke & Co.; Aguas Calientes, by Vaccaro Bros.; Ancanquilha, by J. B. Carrasco; Santa Rosa, by M. Ballesteros; Carcote, by Carcote Sulphur Co.

GOLD.

Gold was produced in Chile before the Spanish conquest. It exists in various parts of the Republic. In 1916 there were 2,584 gold claims registered in Chile.

What was believed to be an important discovery in gold was made in the year 1911 at Patu, near Constitución, no great distance south of Santiago. A company known as the Compañía Orero de Patu was formed with a capitalization of £85,000. There was a wild rush to buy these shares and on one occasion they sold at 220 per cent. of par. The deposits turned out to be only of small depth and soon gave out altogether. However, a fair amount of ore was taken out previous to this and a large portion of the original investment was recovered. Operation at the mine were completely suspended early in 1913.

COPPER.

In recent years Chile has produced between 4% and 5% of the world's total copper output. Prior to the war production had declined from the high figure attained between 1870 and 1880, but in 1916 it reached a higher point than ever before and has been mounting since.

It is said that Chuquicamata Copper Mines, which were purchased by American capitalists for \$1,000,000, are now producing 10,000 tons of copper ores per day, valued at 580,000 pesos currency. It is proposed to increase this output in the near future fivefold. The mines employ about 6,100 persons and have machinery and installations of any approximate value of 14,000,000 gold pesos.

At Chuquicamata, Chile, lies probably the largest copper deposit of the world, which is in the form of an enormous mountain peak, or indeed several peaks. Instead of delving into the bowels of the earth for the ore, it is only necessary to blast

away portion by portion and scoop up the shattered earth with giant steam shovels. A modern railroad about 1 mile long is used to convey the ore to reduction plants; and as scientists have figured that there are more than 400,000,000 tons of "proved" ore available, the outlook is especially promising in point of supply.

The most important companies engaged in copper mining are:

Chile Copper Company (Holding company). Capital authorized, \$135,000,000 American money, in 5,400,000 shares at \$25. of which \$95,000,000 are outstanding. There are collateral trust bonds 7% 10 year convertible bonds issued to the amount of \$15,000,000 and 6% 15 year convertible bonds to the amount of 17,665,000.00.

Braden Copper Mines Company (Holding Company). Capital, \$12,953,530 American money, in \$50 shares. Bonds issued, 15 year 6%. Sinking fund gold bonds, to the amount of 13,973,000, owns the whole stock and bonds of the Braden Copper Company.

Braden Copper Company (Operating Company). Capital, 4,332,030, American money, in \$10. shares. First mortgage bonds issued, \$4,000,000. Owns and operate mines in Chile.

Other copper producing companies are: Société des Mines et Usines de Cuivre de Chanaral, a French concern; the Sociedad de Minas y Fundiciones de Carrizal, with Chilean capital; the Central Chile Copper Co.; the Compañía de Minas y Fundación "Intenso," the Guayacan and the El Porvenir mines.

IRON.

The principal deposit of iron ore is found in the Coquimbo district, where practically 1,000,000,000 tons are said to exist. The principal deposits in this district have been acquired in the interests of the Bethlehem Steel Corporation, of the United States. A large fleet of 17,000-ton steamers is to be put in service to handle this mineral, which, it is claimed, can be mined and shipped at a very low cost. The property formerly belonged to a French company known as the Société des Hauts Fourneaux, Forger, at Acieres du Chile, which owns extensive iron deposits at Corral in south-central Chile.

The ore from the Bethlehem Steel Co.'s mines at Cruz Grande is excavated from the side of a hill and sent by means of short aerial ropeways to an overhanging cantilever discharger, by means of which it is discharged into the holds of the steamers, thus avoiding lighterage. The property is of considerable value.

In addition to the Cruz Grande mines there are enormous other iron deposits of present and future value, in the mountain desert lands of northern-central Chile. None are as important as the Cruz Grande mines.

The mining industry is undergoing a period of great activity. In northern Chile, where the mineral wealth is enormous. A number of commissions of Chilean and foreign engineers are now making a study of this zone. In the Department of Elqui, Province of Coquimbo, the following mines are being exploited: In the vicinity of the Turbio and Cordillera Rivers, 8 silver; 4

copper, and 3 gold mines; near Claro River, 2 gold, and 2 silver mines, and on the Elqui River, 5 copper, 2 silver, 1 ferric sulphate, 1 iron and pyrite mines.

FISHING.

There are 11 fish and shellfish canneries with a combined capital of 789,685 pesos paper in operation in Chile.

Punta Arenas, the most southerly city in the world, and the only free port in the western hemisphere, is becoming the great fishing centre of the west coast of South America. It is the great provisioning station for Norwegian trawlers who used to operate in southern latitudes before the war, and who will soon resume their activities.

The fishery station at Lautaro produced in 1917 about one million eggs of salmon and other edible fish, which were distributed in different rivers in the country.

The Chamber of Deputies has approved the President's project of encouraging the fishing industry by the payment of bounties for the period of 10 years.

The "Sociedad Nacional de Pesca," a corporation fostering the fishing industry, has been established with a capital of 500,000 Chilean pesos. One of the objects is the placing of several varieties of fish along the entire Chilean coast. This has been done between Coquimbo and Valdivia. The company has also installed a plant in Talcahuano where fish are cleaned, packed and shipped. The establishment has a large refrigerator where fish are kept until ready for shipment by train.

FARMING.

The wealth in cattle was estimated in 1917 as follows:

Cattle, 2,000,000 heads; sheep, 5,000,000; nearly 400,000 goats, 260,000 pigs; 27,000 llamas and 15,000 alpacas.

Agriculture generally represents a high proportion of Chilean industry.

The varieties of climate found in the long, narrow stretch of Chilean valley land between the Andes and the coast range, permit the cultivation of a great diversity of food plants. Apart from the barren nitrate fields, the northern section of Chile produces in isolated spots small quantities of tropical fruits and vegetables, the central belt yield cereals and fruits of the temperate zone, and the southern region is favorable to crops requiring a colder climate. Irrigation is necessary in the northern and north central provinces, but rains increase toward the south, where the precipitation and products are comparable to those of Oregon, Washington, and British Columbia. It is estimated that there are 36,000,000 acres of tillable land in Chile, of which, however, only about 3,000,000 are now under cultivation. The largest acreage is devoted to wheat, while barley, oats, rye, corn, beans, peas, and potatoes make up the remaining staple crops. Fruit growing is also important.

The area under cultivation is estimated as follows: Cereals,

597,483 hectares; Vegetables, 58,889; Potatoes, 31,890; grapes, 56,227; other fruit, 22,376.

The crops of 1919 were reported as follows: White wheat, 5,267,483 kilos; summer wheat, 608,562 kilos; rye, 48,789 kilos; barley, 865,885 kilos; oats, 471,740 kilos; beans, 617,519 kilos; chick peas, 27,025 kilos; green peas, 178,929 kilos; potatoes, 2,658,549 kilos; corn, 432,236 kilos.

Practically no farming activities occur in the northern or nitrate states, north of Coquimbo (30° south latitude). The chief agricultural region is in the central zone, the area in grain increasing from north to south until in the province of Malleco, at about 38° south latitude, below Concepción, nearly one-fifth of the country's grain area is found. From this point the acreage in grain decreases, very little cereal being produced in the southernmost territory of Magallanes. Wheat grows chiefly from Aconcagua to Cautin (32° to 39°).

The average yield per hectare, in the whole country, in metric quintals, is as follows: Barley, 18.7; beans, 11.9; corn, 15.5; lentils, 9.9; oats, 15.8; peas, 10.4; potatoes, 82.6; rye, 12.6; wheat, 12.5.

The largest yield is obtained in the province of Santiago.

The irrigation systems in Chile, which are constructed at great expense, are well regulated by adequate laws. The river Maipo, south of Valparaíso, has been largely utilized for irrigating purposes, and it has also been used to elevate the waters of Lake Aculeo in order to irrigate tracts of land on three different levels above the lake. Plans for extension of the irrigation system are under consideration.

The Chilean Government has established a service of traveling farm experts, who cover the principal grain-raising districts, and give practical instruction with demonstrations of improved methods of cultivating crops. Much educational work is done through Government publications.

Notwithstanding Chile's usually large production of wheat, considerable quantities of foreign grown wheat are imported annually, and this fact led to a questioning of the country's ability to supply its own breadstuffs. To meet this inquiry the Chilean Statistical Office made a compilation of the production, consumption, imports, and exports of wheat for the twenty-year period from 1895 to 1914 inclusive, which showed an excess production each year, the surplus being usually shipped to other Latin-American countries.

The National Dairy Congress, which closed its sessions in Santiago on November 3, 1918, recommended, among other things, the establishment by the Government of a Department of Agriculture and Colonization; the enactment of a law making obligatory the tuberculinization of cattle; the pasteurization of milk; the establishment of chemical municipal laboratories with sections for analyzing food substance; the maintenance of a national laboratory for the preparation of vaccine virus; the establishment of dairy experiment stations; the organizing of co-operative societies for the sale of hygienic milk in cities; the manufacture of products for export and their shipment abroad

in vessels equipped with cold-storage plants; the establishment of dairy schools in the central and southern parts of the country; the teaching of dairying in the rural normal schools of the Republic, and the holding in Buenos Aires in September next of an International Dairy Congress.

The technical commission of Congress made recently a report to that body recommending legislation for the appropriation of fifty million pesos for irrigation purposes. The plan consisted of several projects, such as: building a dam in the Choapa River, in the province of Aconcagua; constructions of canals from the Laja River, in the province of Concepción; construction of system of canals in the Cogoti River in the province of Coquimbo; construction of a system of dams for the use of the water of Laguna lake, in the same province; construction of a system of dams for the use of the water of the Mondaca Lake, in the province of Talca; construction of a dam in the Alvarado ravine, in the province of Valparaiso.

The following are the most important concerns engaged in farming and agricultural enterprises in Chile:

Southern Patagonia Sheep Farming Co., Ltd. Registered in London in 1912. Office, 29 Great St., Helen's London, E. C. Capital, authorized, \$1,250,000; issued, \$780,015. Owns sheep farming properties in Argentina and Chile.

Tierra del Fuego Development Co. (Sociedad Exploradora de Tierra del Fuego). Incorporated in Chile in 1892. Head office, Valparaiso. Capital, \$9,000,000. Pastoral freehold lands in Chile and Argentina, 2,298,196 acres; leasehold, in Chile, 4,910,000 acres.

Anglo-Chilean Pastoral Co., Ltd. Registered in London in 1904. Office, 31 Budge Row, Cannon St., London, E. C. Capital, authorized, \$600,000; issued, \$41,800. Holds concessions of 1,440,000 acres land; sheep and cattle raising.

INDUSTRIES.

In 1917 there were 21,306 industrial establishments in operation in Chile as compared with 19,218 in 1911 and 15,796 in 1906. The value of raw material for these establishments in 1916 amounted to 802,135,862 gold pesos, out of which were manufactured merchandise valued at 1,407,137,140 gold pesos.

The tin smelter recently erected at Arica has a reverberatory and a roasting furnace with a capacity of 1,000 tons of barilla per month, and an approximate production of 650 tons per month. The plant was enlarged so as to make its capacity 1,500 tons per month.

A new tannery and shoe factory under the name of "La Magallanes Curtidora, Fábrica de Calzado y Anexos," was organized in Punta Arenas in May, 1917 with a capital of \$300,000.

An Electrometallurgic Company for the manufacture of steel by the use of electric furnaces has been organized in Santiago.

A Cheese Factory has been established near Coquimbo.

A Fire-Brick Factory has been established at Las Animas, near Valdivia, with a capacity for the manufacture of 1,000 bricks per day.

A Piano Factory is in operation in Punta Arenas, the southernmost city of Chile. Native woods are used in the manufacture of these instruments, but the industry is somewhat handicapped,

due to the fact that Punta Arenas is a free port, and exports from that city, even of articles manufactured out of Chilean raw material, are subject to the payment of customs duties on entering other ports of the country.

The shoe and leather industry, especially the tanning industry, is steadily increasing. There are about 13,000 persons employed in it. The capital invested is about \$12,500,000 gold. The yearly output about \$20,000,000 gold. The first shoe factory utilizing machinery was started in Valdivia, and now there are more than 22 factories of various sizes in different cities of the Republic.

The tanning industry reached its greatest development in Chile in 1898, during which year the exports of sole leather amounted to 3,102,888 kilos, as compared with 1,926,100 kilos in 1908 and 393,460 kilos in 1915. Since the beginning of the European war, and especially during the last two years, there has been a revival of the industry in the Republic owing to the scarcity and high prices of imported leather. There are 87 tanneries in the country, only about 15 of which have an annual production each of over 10,000 hides. The large tanneries are at Santiago, Valparaiso, and Valdivia, and are operated to a great extent by foreign interests, especially French and German companies. Chile has large quantities of excellent tanning barks.

The manufacture of condensed milk has a bright future in the Department of Valdivia. Lands are constantly cleared and rapid strides are being made toward the breeding of fine stock.

There are about 20,000 head of cattle in the Department giving on an average 3 liters of milk per head daily.

With a capital of 1,500,000 gold pesos, under the name of Sociedad Industrial y Frigorífica del Sur, a new stock company has been formed in Osorno to pack meats, manufacture fertilizers, and cure hides on an extensive scale.

The Norwegian Industrial Co., and the Norwegian Industrial Bank have commenced operations in Chile under the name of Electrical Chemical Co. (Ltd.), (Chilean-Norwegian Industrial and Financial Co.) and will promote various commercial and industrial enterprises.

On November 9, 1918, the first of the furnaces for the manufacture of steel of the Electric Metallurgical Co. commenced operations. Plans have been made for the enlargement of the plant as soon as possible.

A Bottle Factory has recently been installed at Rancagua, with a daily capacity of 35,000 bottles. The output of this factory will be used largely in supplying the markets of southern Chile.

The bureau of the internal tax published the following figures on the tobacco industry for 1918: Companies registered: Existing factories, 143; factories in operation, 124; importers, 93; growers, 290; wholesalers, 369; retailers, 22,724; dealers in leaf tobacco, 26. Leaf tobacco produced: Area planted, 1,512 hectares, and tobacco harvested, 2,832,481 kilos. Manufacture: Cigarettes, 68,100,578 packages of 14 each; 24,351,354 packages of 28 each; 16,469 packages of 98 each; cut tobacco in packages,

1,000,527 kilos; large cigars, 1,208,177; and small cigars, 1,275,520. Leaf tobacco sent to the factories, 3,292,086 kilos; turned into cut tobacco, 3,284,664 kilos; made into cigars, 12,914 kilos. Cut tobacco for manufactures, 2,664,087 kilos, of which 1,870,970 kilos were made into cigarettes and 1,038,839 kilos into packages of cut tobacco.

The Bulletin of the Sociedad de Fomento Fabril of Santiago (a semi-official organization to promote Chilean industries), announces that Chile operates 192 flour mills, 50 macaroni factories, 12 biscuit and 4 chocolate establishments, and 10 sugar working or refining mills, besides canneries, olive and cottonseed oil mills, oatmeal mills and wine presses. Much of the raw material of these factories is drawn from other countries of South America. The wine industry is scattered through the central and south regions.

The following are among the most important foreign companies, besides those already mentioned, engaged in the manufacturing business in Chile:

Chilian Mills Co., Ltd. Registered in London in 1900. Office, 104 Kink St., Manchester, England. Capital, authorized, \$750,000; issued, \$265,075. Owns cotton mills in Chile; closed in 1915 owing to the war.

Chilian National Ammunition Co., Ltd. Registered in London in 1896. Office, 5 Cook St., Liverpool. Capital, authorized, \$225,000; issued, \$174,810. Owns works in Valparaiso.

Santa Rosa Milling Co., Ltd. Registered in London in 1913. Office, 7 Gracechurch St., London, E. C. Capital, authorized, \$2,500,000; issued, \$2,000,000. Owns flour mills in Callao, Per., and Soncción, Chile.

The industrial firms of Chile number 2,728 and have a capital of 596,000,000 pesos and employ 65,000 operatives. There are 592 firms with a capital of over 150,000 employing in total 43,000 operatives, or 70 per cent. of the total population engaged in the industry.

FOREIGN TRADE.

An analysis of Chile's imports during the four-year period immediately prior to the war, shows that the value of imports into Chile from all countries increased between 1910 and 1911 and decreased between 1911 and 1913. The imports from Great Britain showed a corresponding decline for the imports 1912 and 1913, and those from Germany only a slight increase for the year 1912 and a decrease for 1913. The United States, alone of the three largest contributors, showed a steady increase for each succeeding year of the period in spite of the fluctuating total values. France, Argentina, Peru, India, Italy, and Spain all showed a decrease in the closing year as compared with the opening year of the period.

After the war started Chilean foreign trade was greatly disturbed, despite the fact that the Allies were in continued need of two of the principal Chilean products—nitrate and copper. How deeply foreign trade was disturbed is shown by the following figures:

In 1914—Imports, 269,756,699; exports, 299,675,435.
 In 1915—Imports, 153,211,557; exports, 327,479,158.
 In 1916—Imports, 222,520,822; exports, 513,584,744.
 In 1917—Imports, 355,077,027; exports, 712,289,028.
 In 1918—Imports, 436,074,065; exports, 799,625,417.

The total foreign commerce for 1918 amounted to 1,235,699,-482, in Chilean money, worth at that time 18d as an average, showing an increase of over 168 million chilean pesos over the previous year.

According to official statistics the increase in the imports affected mainly the manufactures, which absorbed about two thirds of the increase, and the precious metals which comprised the other third of the increase.

As to the countries of origin, the increase in the imports was as follows: the United States, with an increase of about 29 million pesos over the previous year; Great Britain, with 17 millions; Argentina, with 10 millions; Japan, with 8,500,000 pesos; India, with 4 millions; Peru, about 4 millions; Australia, with 2,500,000 pesos; Sweden, one million. Expressed in United States gold the imports for 1918 were, \$159,167,034; exports, \$291,863,277; total, \$451,030,311.

TRADE WITH THE UNITED STATES.

The following are the principal Chilean products imported in the United States in 1918:

Antimony, ore, \$216,791; Art works, \$74.00.	337,930; Honey, \$28,478; Household and personal effects, \$2,-835.
Bismuth, \$8,352; Brass, fit only for remanufacture, \$435.00; Breadstuffs, \$22,838.	India rubber, unmanufactured, \$3,710.
Chemicals (principally nitrate of potash), dyes and medicines, \$70,588,890; Cocoa, or Cacao, crude, \$27,866; Coffee, \$33,-536; Copper, ore, \$7,357,480; Copper and manufactures, \$38,-356,382.	Lead ore, \$183,611; Leather and tanned skins, \$72,189.
Dyewoods, \$4,920.	Meat and dairy products, \$181,-739; Minerals, \$76,476.
Fertilizers (except nitrate), \$30,-244; fruits and nuts, \$190,-572; Furs and fur skins, \$997; Glue and glue size, \$50,401.	Platinum, \$300.
Hair, unmanufactured, \$5,657; Hides and Skins (except fur skins), raw or uncured, \$1,-	Seeds, grass-clover, red, \$4,-947.
	Tobacco leaf, \$3,688; Tin, \$9,-356,284; Tungsten-bearing ore, \$1,364,461.
	Vegetables, \$2,268,318.
	Wax, \$61,258; Wool, hair of the Angora goat, etc., unmanufactured, \$8,829,856.
	Zinc, ore and calamine, \$49,598.

The previous list includes Bolivian goods brought to the United States from Chilean ports.

The following list shows the American goods exported to Chile in 1918:

Abrasives, \$46,487; Agricultural implements, \$243,564; Aluminum, and manufactures of, \$15,034; Animals, \$14,995; Asbestos, manufactures of, \$35,020; Asphaltum, \$68,164;	Athletic and sporting goods, \$15,724.
	Babbit metal, \$50,228; Blacking \$59,933; Brass, \$295,165; Bronze, manufactures of, \$25,972;
	Breadstuffs, \$717,349; Broom

corn, manufactures of, \$2,618; Brushes, \$1,675; Buttons and parts of, \$36,706.

Candles, \$4,650; Cars, automobiles and other vehicles, \$5,490,998; Celluloid, and manufactures of, \$38,234; Cement, hydraulic, \$158,731; Chalk, manufactures of, \$10,374; Chemicals, drugs, dyes and medicines, \$2,049,549; Chewing gum, \$6,545; Clays, fire, \$3,700; Clocks and watches, \$51,146; Coal and coke, \$2,365,118; Cocoa and chocolate, prepared, etc., \$42,800; Confectionery, \$31,838; Copper, \$536,627; Cork, manufactures, \$25,502; Cotton, manufactures, of \$7,333,773.

Dental goods, teeth and other, \$26,520.

Earthen, stone, and china ware, \$211,930; Electrical machinery, appliances and instruments, \$2,162,887; Explosives, \$2,019,122.

Feathers, \$5,611; Fibers, vegetable, manufactures, \$483,976; Fire extinguishers, \$15,989; Fish and fish products, \$423,620; Flavoring extracts, and fruit juices, \$8,329; Fly paper and traps, \$10,371; Fruits and nuts, \$51,119; Furniture of metal, \$54,986; Furs, raw or dressed, and manufactures of, \$66,236.

Glass and glassware, \$571,982; Glucose, \$26,566; Gold and silver, manufactures of, including jewelry, \$39,696; Grease, \$203,313.

Hair, animal, manufactures of, \$8,519; Hats, and materials for, \$26,260; Hops, \$83,481; Household and personal effects, \$10,236.

India rubber, manufactures of, \$1,261,066; Ink, \$56,788; Instruments and apparatus for scientific purposes, \$166,581; Iron and steel, \$19,746,511.

Lamps, chandeliers, etc., (except electric), \$77,748; Lead, \$223,677; Leather, \$762,001.

Meat and dairy products, \$395,711; Metal polish, \$7,819; Metals, \$159,482; Motor boats, \$18,788; Mucilage and paste, \$7,865; Musical instruments, \$147,601.

Naval stores, \$261,838; Nickel, and manufactures of, \$19,626; Notions, \$42,935.

Oakum, \$13,475; Oilcloth, and linoleum, \$114,131; Oils, \$4,628,640.

Paints, pigments, colors, and varnishes, \$714,333; Paper, \$1,777,222; Paraffin and paraffin wax, \$1,374,788; Pencils, \$73,231; Pens, \$5,453; Perfumery, cosmetics, and other toilet preparations, \$89,913; Phonographs, graphophones, gramophones, and records, \$76,936; Photographic goods, \$164,047; Plaster, builders' and common, \$429; Plated ware, (except cutlery and jewelry), \$192,316; Plumbago or graphite, manufactures of, \$47,188.

Refrigerators, \$3,442; Roofing felt and similar materials, \$70,985.

Seeds, \$20,107; Shoe finding, \$92,546; Silk, manufactures of, \$208,285; Soap, \$213,609; Spices, \$408; Spirits, wines, malt liquors, and other beverages, \$27,275; Sponges, \$12,801; Starch, \$8,424; Stearin, vegetable, \$7,176; Stone, and manufactures of, \$38,721; Straw and palm leaf, manufactures of, \$7,043; Sugar, refined, \$86,209; Surgical appliances, \$103,373.

Tobacco, manufactures of, \$13,981; Toys, \$52,872; Typewriter ribbons, \$12,484.

Vegetables, \$28,802.

Wall boards (substitute for plaster), \$3,038; Wax, manufactures of, \$40,656; Wood, \$1,533,427; Wool, manufactures of, \$1,051,571.

Zinc, \$211,266.

Exports to the United States from Punta Arenas, Chile, during 1919 exceeded those of any previous year. Wool shipped to American ports up to October 15, 1919, had a declared export value in American dollars of \$10,185,122; sheepskins, \$1,488,200, and sausage casings, \$178,760, making the total declared export value \$11,852,082. The wool totaled in weight 8,585 tons, the sheepskins 1,795 tons, and the sausage casings 111 tons. At the rate mentioned practically no wool and no casings remained to be shipped, and the sheepskins on hand had a value of less than \$200,000.

American toilet articles are not extensively used at present

although nearly all the standard brands are on sale there. There seems to be a preference for French and English articles—a preference that was developed years ago, before the advent of American-made articles. Since the war, however, American preparations have been displayed extensively, and the dealers state that there is no prejudice against the goods and that there has been no complaint regarding the quality, price, or methods of sale.

Importers of toilet articles expect about 90 per cent. profit on cost, retail.

Chile is one of the best markets in South America for sodium products, specially unrefined caustic soda, and silicite and sulphide. These products were imported mainly from Great Britain, but after the war started, American products practically displaced the British. Great Britain, for instance, sold to Chile nearly one and one-half million kilos of caustic soda in 1913, as compared with a little over 90,000 sold by the United States. In 1915, however, American manufacturers sold caustic soda for nearly two million kilos, while Great Britain only sold for less than half a million kilos.

American automobiles have become remarkably popular in Chile during the last five years. This has not been wholly due to the elimination of European sources of supply in the war period. It has been largely the result of a growing familiarity with the conveniences of motor driving, combined with the discovery that these advantages are possible for people of moderate means through the comparatively low prices of certain American cars. Moreover, the high-grade American makes have been demonstrated with success to the class of Chileans that can afford expensive machines. In the social life of the cities the motor car has become an essential, replacing the family coach or carriage.

Outside the cities the lack of good roads in Chile seriously affects the use of automobiles.

In view of the lack of improved roads in Chile, the large increase in the use of motor cars is the more significant. The record of the exports of motor vehicles and parts from the United States to Chile shows that this trade multiplied 43 times from 1913 to 1918.

In 1913, no American commercial cars were imported in Chile. In that year only 78 passenger cars were sent from the United States, with a total value of \$109,982, American money. In the same year, 39 American motor cycles were exported to Chile with a total value of \$8,134.

In 1918, the number of American cars had jumped to 3,390, with a total value of 3,576,511; while the value of parts was \$806,015, the value of tires, \$725,876, and the number and value of the motor cycles exported from the United States, were, respectively, 88 and \$18,041.

In the fiscal year ending June 30, 1919, the number of American passenger cars exported to Chile dropped to 1,057, with a total value of \$1,606,758. In the same fiscal year the value of the parts exported was \$775,556; the value of tires, \$1,130,873. The number of motor cycles of American make imported in Chile in 1919 was 56, at \$13,823.

The decrease in the number of cars is explained by the restrictions in the manufacture and shipment of cars which was in force in the last few months of the war.

American commercial cars were introduced in Chile in 1914. From that date until the end of the fiscal year 1918-19, the number of commercial cars of American make imported in Chile was 460, with a total value of \$713,593, American money.

Seven years ago, Chile imported cars mainly from Germany and France. In that year, the imports of automobiles, parts and tires from France amounted to \$385,346, and from Germany, \$422,455, while the United States' share in that trade was only \$276,958. In 1917, however, the American trucks, passenger cars, accessories, tires and motor cycles imported by Chile totaled \$11,994,098, while the French goods in this line had dropped to the insignificant figure of \$114,512.

There is now a great demand for trucks in mining sections, specially in nitrate districts.

The most popular cars for use in the cities of Chile are limousines, landaulets, and similar models, with decorative finish and luxurious upholstery. Black or dark-blue cars should not be shipped except on special order. Not many small cars are used, and the few to be seen usually have a small seat behind for the liveried chauffeur, for though the owner of the car drives he is required by custom to have a chauffeur in case of need. The two-passenger car is, therefore, not popular, as it seats only one person besides the chauffeur. The taxicabs, of which a large number are in use, represent the less expensive makes, and are usually purchased by individuals or companies on the installment plan.

The underslung type of car is not practicable; cars should have a clearance above 10 inches, and the tread must be at least 60 inches. For farm freight 2-ton trucks are used chiefly, while lighter trucks are used for town or city delivery. In the southern territory trucks should be adapted for hauling wood and logs. In the northern districts ore and supplies for mining camps will fill the trucks.

According to data published by the superintendency of the Chilean customs, the exportation of grains effected through the ports of the country in 1918 was as follows: Green peas, 1,226,015 kilos; oats, 21,561,648 kilos; barley, 24,450,728 kilos; beans, 9,472,298 kilos; wheat flour, 10,056,767 kilos; lentils, 2,647,229 kilos; potatoes, 297,135 kilos; and wheat, 16,465,993 kilos.

The exportation of hides, in the first four months of 1919 was 14,700 cowhides, 80,387 sheepskins, and 247,916 pigskins were exported, as against 5,620, 53,100 and 146, respectively, in the entire year 1918 and 35,896, 135,450, and 24,228, respectively, in 1917.

Chile has been a better market for imported furniture than any other of the Pacific countries. The character of its population and the favorable climatic conditions have contributed largely to its advancement.

Whether or not Chile continues to be a market for foreign-

made furniture will depend largely upon the ability of the Chilean manufacturers to furnish a product which will take the place of that imported before the war. High prices and the difficulty of obtaining imported furniture during the last few years have given an impetus to the domestic industry. The Chilean furniture manufacturers have greatly improved the quality of their product. However, it will be some time before the domestic-made furniture can entirely take the place of the finer, more dependable foreign-made article.

England was, before the war, the chief source of supply for Chile in furniture. This was due largely to the fact that British manufacturers sent their representatives to that country to solicit business, and as a result many of the public buildings, clubs, and private homes are furnished with English furniture of high quality.

The French manufacturers obtained a good share of Chile's trade in fine house furniture. Before the war it was the custom for Chilean families of wealth to travel to Europe and bring from France suites of furniture for their homes.

American manufacturers supplied office furniture and a small quantity of house furniture of cheap and medium grades. The finest quality of American house furniture is not generally known in Chile, and apparently the manufacturers have not seriously endeavored to place it on the market.

American trade in Chile can be increased substantially by establishment of adequate banking facilities designed to meet the needs of American exporting concerns; intensive development of trade in those commodities in which American manufacturers are the recognized leaders; the establishment of convenient centers of distribution so that merchandise can be supplied on short notice. The necessity for American manufacturers to concentrate their efforts on lines in which they are already organized industrially to overcome foreign competition is most apparent. Development of trade in labor-saving devices, general machinery of all kinds, construction projects, and municipal improvement is especially urged.

The industrial as well as the agricultural development of Chile leads to a demand for American machinery.

An American chamber of commerce has been formed at Valparaiso for the purpose of promotion of trade relations between merchants of Chile and the United States. Practically all American firms established in Valparaiso are supporting the new organization, and it also is receiving support from many Chilean firms.

The commerce of Chile with Argentina, Bolivia, Brazil, Cuba, Ecuador, Panama, Peru and Uruguay amounted to 83,445,278 pesos, consisting of imports, 65,912,507 pesos, and exports, 19,532,771 pesos. Chile imported from Peru merchandise valued at 27,880,195 pesos, and from the Argentine Republic 21,046,867, and exported to Peru, 4,275,349 pesos, and to Argentina, 3,653,122 pesos.

In 1918 the trade between Chile and Argentina amounted to the sum of 16,978,047 gold pesos, Argentine money. Of this,

8,343,661 pesos were the imports and 8,634,486 pesos the exports. The balance was in Argentina's favor, for 290,725 pesos. These figures show a considerable increase over those of the previous year, when the imports were only 3,732,224 pesos and the exports 4,264,991 pesos, Argentine money.

The shipments of Chilean grain and vegetables to other Latin-American countries have grown greatly in the past two years. Not only have these exports gone to Chile's nearest neighbors—Bolivia, Peru, Argentina and the interior of Brazil—but to more distant ports in Colombia, Cuba, Mexico, and the West Coast of Central America. With the good crops for the 1917-18 year Chile was able to export nearly 2,000,000 metric quintals or about 1,000,000 bushels of wheat in 1919. In addition to the 1918 surplus, Chile had 7,000,000 metric quintals of wheat left from the 1916-17 crop.

The government forbade the exportation of cereals until June 1, 1920. Such articles may be exported only to the surrounding countries. The same decree prohibits the exportation of rice, sugar, tea, coffee, yerba mate, table oils, and edible fats.

CUSTOM REGULATIONS.

The following regulations must be observed in preparing the documents covering shipments for Chile:

Shipments require four copies of the consular invoice, two of which are returned to the shipper. Any alteration or erasure on invoices render them valueless. If an error is made, a separate letter of correction in triplicate, necessarily in Spanish, must be presented to the consul. Three dollars is the charge for letters of correction, in the case of change of steamer the letter is sufficient. Bills of lading must be presented to the consul, who certifies one copy and returns it to the shipper and retains the other for his files. Goods may be shipped either direct or "to order." Firearms, munitions, etc., require no special permit. A stencil must be used in marking packages for shipment, and the gross weight in kilos of each package must be marked thereon. Consular fees are payable at the following rates: Certification of a bill of lading of merchandise shipped to Chilean ports, per copy, \$0.75; certification of invoices which must be presented at the Chilean custom house for clearance of merchandise; on shipments not exceeding \$200 in value, \$3; exceeding \$200 in value $\frac{3}{4}$ per cent. Each extra copy of invoice, 75 cents; legalization and identification of a signature to a document, \$3; filing a document, \$3; an authorized copy of a document executed or filed in the consulate, per page \$1.50; translation of documents or certification of a translation, per page, \$1.50; set of four consular blanks, 30 cents.

Chile has an Ambassador in Washington, and the following consulates in the United States: A consulate general in New York, the head of the service in the U. S. A.; Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Honolulu, Hawaii; New Orleans, La.; Norfolk, Va.; Philadelphia, Pa.; Portland, Ore.; San Francisco, Cal.; Seattle, Wash.; St. Louis, Mo.

The executive committee of the Chilean National Chamber of Commerce sent a note to the Minister of the Treasury, urging that a law be enacted establishing a fixed rate for the certification of consular invoices on shipments from foreign ports to Chile. At the present time these charges range from \$3.00 up, according to the declared value of the shipment. Similar legislation was urged in 1910 by powerful interests.

Porcelain, glass, etc., should come in strong cases suited for the class of contents. Heavy or fragile articles, such as of metal or porcelain, liable to move within the package, should be packed in cases with subdivisions in the interior. Porcelain and glass goods may often be advantageously packed in casks.

Earthenware fittings have been imported for some time packed with straw wrapped around each article in the package, and the result has been all in favor of this style of packing. Great care should be taken by packers in binding the straw better with strong cord.

Bathtubs should be packed three in a crate with a strong frame, all the size of the roll or rim of the bathtub between each bathtub in the crate, and felt placed all around wherever the bathtub touches the frame or crate. The three bathtubs should then be securely bound together at the rims before being placed in the crate, so that in the event of the crate being broken the bathtubs still have the frame to protect them.

Shippers, in deciding about the method of packing, should take into account the way the duties are paid. Whenever the goods are taxed at the custom house in proportion with the gross weight a light packing is necessary. If the goods are taxed in proportion to the legal weight, strong packing is possible, but very light wrapping should be used; while for articles paying in proportion to their net weight, both strong packing and wrapping are desirable. Of course, the matters of expense, fragility and volume are also to be taken into consideration.

CUSTOM TARIFF.

The Chilean custom tariff has been modified as the European war has changed trade conditions and altered, consequently, the normal custom revenue. The import duties are collected on the basis of kilogramme of weight; except some beverages and liquids which pay by the liter, and some manufactured articles that pay by the piece or dozen pieces. Very few articles pay *ad-valorem*.

The principal items included in the list of articles admitted free of duty are: goods imported by the government or for public use; live plants, seeds for planting; fertilizers, live animals, agricultural machinery and implements, rails, some tools, printing machinery, printing plates, mineral ores, coins, uncut gems, fruits and vegetables, theatrical equipment, etc.

One of the most important requirements for packages shipped to Chile refers to stenciling. It is obligatory that all cases, bales, etc., for Chile should have stenciled on them in black characters the port of destination as well as the net and gross weight in kilos. The letters should be at least 2 inches high. Consign-

ments continually arrive at Valparaiso bearing marks and numbers other than in stencil, and consequently the goods have to be re-marked before they can be cleared. In order to avoid confusion these marks and no others should be put on the tops of cases.

In respect of cases containing assorted goods facility and economy in clearance through customs is gained by stating the weights of each kind of goods separately on all the documents.

The following are the import duties as determined by the Chilean tariff now in force. Abbreviations used are: l. w. legal weight; g. w., gross weight; n. o. s., not otherwise specified.

Amounts are in Chilean pesos, value of which in American money fluctuates.

Abacus, free.—Acetates, aluminum, n. w., .60; amyl, n. w., .50; barium, n. w., .30; copper, n. w., .25; lead, n. w., .10; manganese, l. w., .75; mercury, n. w., 2.50; sodium, g. w., .10; zinc, n. w., .40.—Acetone, pure, l. w., .40; sulphite, n. w., 2.50; caustic soda, g. w., .20.—Acids: acetic, arsenious, boric, lactic (industrial), nitric and oxalic, g. w., .012; carbolic, crystallized, g. w., .040; liquid, g. w., .005; carbonic, capsules, l. w., .050; in iron drum, g. w., .005; citric, salicylic and tartaric, .050; hydrofluoric and tannic, l. w., .075; hydrochloric, g. w., .004; phosphoric, liquid, l. w., .025; pyroligneous and sulphuric, g. w., .003; sulphurous, g. w., .005; simple acids, not otherwise specified, n. w., 2.50.—Adding machines, l. w., .050.—Advertising matter, g. w., 1.00.—Aeroplanes, free.—Agar-agar, l. w., .075.—Agaric, l. w., .040.—Agate, rough, l. w., .050; manufactured, l. w., 1.20.—Alabaster, in blocks, .002; in not polished slabs, .003; in polished slabs, .006; powdered, .005.—Bath tubs and tiles, .015; small articles, not over 40 centimeters, .030; not otherwise specified, .020; all gross weight.—Alarm clocks, l. w., 2.00.—Albumen, n. w., 1.00.—Albuminate, silver, n. w., 40.00.—Albums, with covers of tortoise shell, ivory or pearl, 8.00; n. o. s. 2.00; both legal weight.—Alcohol, amyl and methyl, l. w., .050; ethyl, n. a. s., l. w., 2.50; solid, carbureted, g. w., .025; methylene for denaturing alcohol, g. w., .020.—Aldehydes, l. w., .070.—Alizarine, l. w., 1.20.—Alkaloids: alicine, 3.00; caffeine, coumarine and salicine, 6.00; strychnine, quinine and vaniline, 10.00; n. o. s., 2.50; all n. w.—Ainseed, g. w., .045.—Almanacs, 1.00.—Almonds, in the shell, g. w., .025; shelled, g. w., .040.—Aloes, l. w., .025.—Alpaca wool, g. w., .050.—Alpargatas, 1.20; soles, .050.—Altars, free.—Aluminum and alloy, free; manufactures, n. o. s., .070; nickel-plated, 1.00; silver or gold-plated, 2.50 (all l. w.); pieces for buildings g. w., .020; nails, .016; small articles, l. w., 2.50; n. o. s., l. w., 1.50; coffins, g. w., 4.00.—Alumina, .060.—Aluminum compounds: acetate, aceto-tartrate and oxide, n. w., .060; sulphate, g. w., .005; n. o. s., n. w., .002.—Amalgam, .005 per gram.—Amber, rough, n. w., .050; mouthpieces or smoking articles, n. w., 160.00; colors or imitation, 12.00.—Ambergris, .020 per gram.—Amidol, 12.00.—Ammonium: benzoate, bromide, and floride, n. w., 1.00; bichromate, oxalate, and sulphocyanide, n. w., .040; carbonate, phosphate, nitrate and sulphate, g. w., .015; chloride, g. w., .002; perchlorate, free; n. o. s., n. w., 2.50.—Ammonia, g. w., .008; sulphhydrate, solution, .020.—Ammunition, g. w., .012.—Amylene, n. w., 5.00.—Anchors, g. w., .001.—Aniline, l. w., pure, .040; paints, l. w., 1.20.—Animals, not otherwise specified, free.—Annatto, g. w., .015.—Anthracene, n. w., 1.50.—Antimony, metallic, n. w., .040; compounds of sulphide, g. w., .010; n. o. s., n. w., 1.00.—Apparatus, calculating, l. w., .050; dating and punching, l. w., 1.20; disinfecting, for public health service, free; for domestic use, legal weight, 1.00; divers', free; hoisting, g. w., .005; for making medicinal wafers, l. w., 1.50; for reproducing manuscripts, l. w., .050; gymnasium, g. w., .045; industrial, g. w., .003; lighting, g. w., .004; mechanical, free; orthopedic, l. w., 2.60; perforating, l. w., 1.20; phonographic, l. w., 1.80; photographic, l. w., .060; piano playing, g. w., .070; recording, for watchmen, 1.20; scientific, free; telephone and telegraph, g. w., .005;

vacuum cleaning, g. w., 0.50.—Architectural plans, free.—Armament, free.—Arms: shot gun, muzzle loading, 1.20; breech loading, single barrel, 3.00; double barrels, 5.00; all l. w.—Artillery, 10.00.—Arsenic, 0.36.—Art objects, free.—Asbestos and manufactures, 0.02.—Asphalt, 0.01.—Astrakhans, 2.80.—Atomizers, 1.50.—Automobiles, passenger, not exceeding 1000 kilos, g. w.; those exceeding pay 0.60 per kilo for the first thousand, and 0.40 for every additional kilo.—Awnings, 0.60.—Axes, military, free.—Axes, for vehicles, the polished end not over 13.5 centimeters in circumference, without nuts, 0.08; with nuts, 0.15; n. o. s. 0.02; all g. w.

Babbit metal, g. w., 0.15.—Bacon, g. w., 0.50.—Bacteriological cultures, free.—Baggage, travelers', free.—Bags, cordage 1.50; fancy, l. w., 13.00; game, l. w., 2.20; grain, g. w., 0.50; grain, cotton, 0.25; of other fiber, 0.03; powder, n. w., 2.00; paper sachet, l. w., 6.00; silk sachet, 13.00; traveling, l. w., 6.00; paper, varnished, with imitation gilding or silvering, 1.00; without same, 0.50; both l. w.—Baize, n. w., 0.90.—Bakery products, g. w., 0.50.—Balances, l. w., 0.70.—Balconies, g. w., 0.20.—Balsams, l. w., 1.00.—Balustrades, g. w., 0.50.—Balls, for children, g. w., 0.12; rubber, l. w., 3.00.—Bandages, abdominal, vegetable fiber, 4.00; wool, pure or mixed, 6.00; silk, pure or mixed, 22.00; elastic, silk, 16.00; others, 6.00; all l. w.—Bands, waist, cotton, 1.80; wool, 3.00; silk and imitation, 16.00; all l. w.; girth, fiber, 0.60; friction, 2.50; transmission, 0.25; all l. w.—Bank notes, l. w., 30.00.—Barberry, g. w., 0.18.—Barium, iodide, n. w., 10.00; pure oxide, n. w., 0.75; acetate, chlorate, and refined sulphate, n. w., 0.30; sulphate, g. w., 0.03; n. o. s., g. w., 15.—Barium, iodide, n. w., 10.00; not otherwise specified, g. w., 0.15.—Barks, for tanning, g. w., 0.02; barks, leaves, roots, not specified, whole or powdered, g. w., 0.25.—Barley, common and malt, n. w., per 100 kilos, 1.65; malt and acorn coffee, l. w., per kilo, 0.40.—Barrels, g. w., 0.20; iron g. w., 0.05.—Bath tubs, other than those of cast iron, l. w., 0.70; marble and jasper, g. w., 0.50; stone and earthen, g. w., 0.08.—Bath sheets, l. w., 1.20; Turkish towelry, l. w., 1.20; pile fabrics for same, n. w., 0.50.—Bathing caps, 3.60.—Bats, l. w., 0.90.—Batteries, electric, g. w., 0.10.—Beads, l. w., 1.50.—Beadspreads, cotton, lace, damask, or pique, 1.50; both l. w.; fur skins, l. w., 5.00; silk, n. w., 10.00; Dutiable according to component fabric with surtax of 25%; wool, n. w., 3.00.—Beans, medicinal, l. w., 1.50.—Bed linen, without openwork, embroidery or lace, n. w., 1.50; with openwork, embroidery or lace not containing silk, n. w., 4.00.—Bedspreads, cotton, lace, 0.85; damask, or pique, 1.50; both l. w.; fur skins, l. w., 5.00; wool, n. w., 3.00; silk, (dutiable according to component fabric with surtax of 25%).—Beer, jerked, g. w., 0.50.—Beer, in bottles, 0.60; in other containers, 0.50.—Belting, machine, l. w., 0.25; coupling for belting, l. w., 0.15.—Belts, cotton, 2.40; electric, 6.00; linen, 3.20; military, with threads of common metal, 16.00; with silver threads, 40.00; silk, 0.90; wool, 5.00; all l. w.—Bellows, for mechanics, 0.06; for household use, g. w., 0.20.—Bengal lights, 0.40.—Benzine, common, g. w., 0.02; refined, l. w., 0.30.—Berries, medicinal, g. w., 0.10.—Beverages, water and ice, free; mineral waters, plain, 0.25; syrups and sherbats, non medicinal, fruit juice with less than 15% sugar, 0.25; all g. w. (see liquors and wines).—Bicycles, g. w., 1.50.—Billiard supplies, accessories, not otherwise specified, 1.00; balls, real ivory, l. w., 25.00; bone, vegetable ivory or celluloid, 3.50; part ivory or imitations of other materials, l. w., 1.80; cloths, n. w., 4.00; tables, 1.00; slates, 0.05.—Binoculars, l. w., 5.00.—Biographs, l. w., 1.80.—Bird seed, g. w., 0.10.—Biscuits, g. w., 0.50.—Bismuth, and compounds, n. w., 3.00.—Bits for harness, l. w., 0.70.—Bitters, alcoholic, in bottles, 2.50 per litre; in other containers, 2.00 per litre.—Blackboards, for schools, g. w., 0.02; made of sheet iron, cardboard, or cloth, free; cloth prepared with emery for blackboards, n. w., 0.75.—Bladders, g. w., 0.12.—Blades, safety razor, per dozen, 0.50.—Blank books, l. w., 1.50.—Blankets, cotton, 0.40; wool, 0.90; wool, traveling, free; silk, 4.00; all n. w.—Blinds, window, g. w., 0.35.—Blocks, concrete, without mosaic or painting, g. w., 0.10; with mosaic or painting, g. w., 0.15.—Blood, dried, g. w., 0.12.—Blue print paper, l. w., 0.50.—Boards, box, g. w., 0.08.—Boat hooks, g. w., 0.12.—Bobbinet, not over 20% silk, l. w., 8.00; from 20 to 90%, 20.00; over 90%, 80.00.—Boilers, g. w., 0.08.—Bolts, g. w., 0.10.—Bolting cloth, n. w., 6.00.—Bonbons, g. w., 1.00.—Bones, calcined, 0.10.—Bone manufactures, for drug trade, l. w., 2.00.—Bookbinding cloth, 0.40.—Book covers, of cardboard,

not printed, g. w., 0.40; not pasted on cardboard, 0.40; pasted on cardboard, 1.30.—Book plates, l. w., 5.00.—Books, advertising, except catalogues, g. w., 1.00; printed, n. o. s.; commercial catalogues, free; with silk cloth, tortoise-shell, pearl, ivory, or imitation thereof, and metal covers, l. w., 3.00.—Bosoms, shirt, per dozen, 6.00.—Bottle covers, of straw or other vegetable materials, g. w., 0.20; of pasteboard, g. w., 0.50.—Bottle stoppers, of cork, g. w., 0.20; with or without other materials, l. w., 1.00.—Bottles, for liquors, g. w., 0.03; glass, n. o. s., not polished, cut, engraved or ground, 0.10; polished on bottom and ground around mouth, with mechanical stoppers or glass stoppers, and rubber rings, 0.06; of ground glass with enamel painted or edged labels for drug stores, 1.00; nursing, 0.10; same with parts of rubber or other material, 0.40; for serum, homeopathic and other remedies, 2.00; all g. w., except last item.—Bougies, l. w., 5.00.—Bows, violin, l. w., 3.00.—Boxes, cash, 0.70; fancy, l. w., 10.00; music, g. w., 0.70; tobacco, l. w., 0.70; paper, g. w., 2.00; wood, packing, g. w., 0.06; for school supplies, 0.30; for other uses, 1.30.—Boxing gloves, l. w., 3.00.—Braid, of straw or wool shavings, for manufacture of hats, l. w., 0.40; silk, l. w., 12.00; for alparagatas, 0.35.—Brakes, railway, g. w., 0.10.—Breast pumps, l. w., 1.20.—Bricks, cork, 0.06; polishing, 0.03; stove, 0.03; building, 0.10; cement decorative, 0.15; slag, 0.03; porcelain, with enamel or mosaic work, 0.25; all g. w.—Bristles, l. w., 3.00.—Bromine, n. w., 0.75.—Bromium, camphor, 3.50.—Bronze, aluminum, free.—Bronze powder, l. w., 0.75.—Brooms, g. w., 1.00.—Brushes, cleaning, bristle or horse hair, l. w., 1.50; of vegetable fiber, for painters, free; table, l. w., 2.50; toilet, shaving, plain, 2.20; hair and clothes, plain, 4.00; same with mounting of pearl, tortoise-shell, or ivory, l. w., 30.00.—Buckets, wood, g. w., 0.20; iron or steel, g. w., 0.10.—Buckles, iron and steel, for clothing, 0.50; same for hats, 1.50; nickel plated, 1.50; silver or gilded, 3.70; all l. w.—Bulbs, for planting, free.—Bulbs, electric, g. w., 0.04.—Bunting for flags, n. w., 1.20.—Buoys, g. w., 0.25.—Bushings for vehicles, g. w., 0.10.—Butter, and margarine butter, g. w., 0.60; cocoa butter, g. w., 0.20.—Buttons, bone, l. w., 1.50, stone and earthenware, and porcelain, 0.50; covered with cotton or linen, l. w., 2.00; with woolen cloth, 1.80; with silk, l. w., 4.00; glass, 0.50; horn, 1.50; wooden, 1.30; iron and steel, 0.70; iron collar buttons, 1.50; aluminum, aluminum, plain, silver or gilded, 2.50; with celluloid, 1.20.—Buttons, push, l. w., 1.80.—Butylchloral, n. w., 5.00.

Cable, wire, g. w., 0.04.—Cacao, crude, 0.10; ground, or in cakes, 0.50.—Cade oil, g. w., 0.20.—Cadmium, Metallic, n. w., 3.00; compounds, not otherwise specified, n. w., 4.00.—Caffeine, n. w., 6.00.—Calcium, carbide, g. w., 0.01; bisulphite and carbonate, g. w., 6.00; chloride, phosphate, lactide and sulphide, 0.40; permanganate and iodide, 7.00; marble lime, 0.15; n. o. s. 1.00; all n. w.—Calendars, g. w., 1.50.—Calipers, l. w., 1.50.—Cameras, photographic, l. w., 0.60.—Camphor, bromide, n. w., 3.50; in lumps, n. w., 2.00.—Can openers, l. w., 0.50.—Candles, stearine, plain, 0.35 decorated, 0.80; spermaceti, 0.18; of wax, l. w., 2.00; sulphur, g. w., 0.12.—Candy, g. w., 1.00; sticks, 0.10.—Cane, matting for furniture, n. w., 1.80; guaquil cane, 40.00 per 100 kilos.—Canes, walking, without parts of precious metal, per dozen, 6.00; with guns or pistols, 5.00 each; with precious metal, and sword canes, 18.00 per dozen.—Cantharides, 1.50; powdered, 1.20; both l. w.—Canvas, cotton, for embroidering, n. w., 0.60; for oil painting, 0.40; manufactures, 0.75; hemp and jute, n. w., 1.80; for oil painting, 8.00; wool, for embroidery, n. w., 1.20.—Caps, blasting, g. w., 0.40; for bottles, g. w., 2.00; for firearms, l. w., 1.20; cotton knit, or lace, for children, l. w., 10.00; for infants, 8.40 per dozen; not otherwise specified, 4.00; bathing, 3.60; for laborers or sailors, 2.40 per dozen; linen for children, per dozen, 8.40; oilcloth, for bathing, 3.60; silk, for children, per dozen, 25.00; straw, per dozen, 6.00; wool, for soldiers, per dozen, 12.00; not otherwise specified, per kilo, 5.00.—Caps and bonnets, cotton and linen, knit or lace for children, l. w., 10.00; for infants, 8.40 per dozen; bathing, 3.60 per dozen; for laborers or sailors, 2.40 per dozen; n. o. s., l. w., 4.00 per kilo; silk, for children, per dozen, 25.00; n. o. s., l. w., 12.00 per kilo; straw per dozen, 6.00; wool, for soldiers, per dozen, 12.00; for officers, per dozen, 24.00; for children, per dozen, n. o. s., 5.00 per kilo.—Capstans, g. w., 0.12.—Capsules, medicinal, gelatine, empty, l. w., 2.40; containing medicines, l. w., 3.50; for bottles, g. w.,

0.20.—Caramel, g. w., 0.40.—Carbines, l. w., 5.00.—Carbolacene, g. w., 0.20.—Carbons, electric light, g. w., 0.04.—Carburets, g. w., 0.01.—Card cases, l. w., 6.00.—Cardboard, tarred, for roofing, 0.06; for drawing, visiting cards, or painting, 0.30; for tickets or in rolls or strips, for cash registers, and that prepared with leather waste, 0.20; all g. w.; for copy presses and other uses, l. w., 0.60.—Cards, playing, l. w., 4.00; post, l. w., 5.00.—Carbines and rifles, breech loading, l. w., 5.00.—Carmine, l. w., 7.50.—Carpeting, wool, printed, 0.60; bristles, 1.20; chenille, 1.60; oriental and imitations, 2.50; all n. w.—Carpets, hemp, jute or similar vegetable fibers, 0.50; cotton, 1.20; wool, of coarse frieze, 1.00; with uncut pile, 1.40; of chenille, 2.00; oriental, 3.50; all n. w.—Cartridges, cardboard, empty, 0.50; loaded, 0.35; metal, empty, 1.20; loaded, 0.50; all gross weight.—Carts, hand, gross weight, 0.25.—Carriages, baby, gross weight, 0.35; gun, free; railway, g. w., 0.10; other, g. w., 1.00.—Casein, n. w., 0.30.—Caseinates, n. w., 0.30.—Cases, cotton, for pillows, n. w., 3.50; fancy, silk lined, l. w., 10.00.—Cash registers and boxes, l. w., 0.70.—Cassia fistula, g. w., 0.70.—Casters, for furniture, g. w., 20.—Castoreum, n. w., 25.00.—Castor oil, g. w., 0.20.—Cataplasms, l. w., 2.50.—Catechu, l. w., 0.20.—Catgut, l. w., 1.80.—Celloidine, l. w., 1.00.—Celluloid, in sheets, l. w., 1.80; manufactures of, n. o. s., l. w., 4.00; celluloid films, with photographs, 6.00.—Cement, Roman, Portland, etc., 0.80 per 100 kilos; compressed, into articles, n. o. s., 0.06 per kilo; both g. w.; for dental use, l. w., 8.00; for shoe soles, g. w., 0.25; for mending china, 0.60.—Cerium, oxalate, net weight, 0.50; other compounds, n. w., 5.00.—Chains, key rings, iron and steel, with links up to 10 millimeters, 0.12; 10 to 40 millimeters, 0.06; over 40 millimeters, 0.01; all g. w.; railroad chains, g. w., 0.10.—Chairs, common wood, g. w., 0.20; other kinds of woods, with inlaid work or with ornaments of common metal, g. w., 1.50.—Chalk, in lumps, or ground, 1.50 per 100 kilos; for schools, in crayons, 0.15 per kilo; tailors', 0.12; for billiards, 0.25; all g. w.—Chalkstone, mercurial, n. w., 0.90.—Charcoal, vegetable, 0.01; drawing, 0.05; powdered, 0.10; all g. w.; Beldoc and similar kinds, l. w., 0.60.—Chassis, for motor cars, g. w., 0.10.—Cheese, g. w., 0.55.—Chest protectors, electric, l. w., 6.00.—Chess games, tortoise-shell, pearl, ivory, or imitation, 25.00; bone, vegetable ivory, celluloid or rubber, 3.50; of other materials, 1.80; all l. w.—Chicory, n. w., 0.40.—China, n. o. s., with mountings of common metal other than nickel, alloys, neither silver nor gilded, g. w., 0.60; with mountings of nickel or alloys, neither silver nor gilded, g. w., 1.20; with silvered or gilded mountings, l. w., 2.20; with mountings of precious metal, l. w., 6.00; painted, gilded, enameled, or decorated, g. w., 0.40; white, g. w., 0.16; ornamental, 0.50; in slabs or sheets, g. w., 0.40.—Chloral, hydrate, 1.00; albacide, 12.00; almidé and dormitol, 5.00; all n. w.—Chloridine, l. w., 4.00.—Chloroform, l. w., 1.25.—Chlorophyl, l. w., 3.00.—Chloroplatinate of potassium, per gram, 0.50.—Chocolate, in form of bonbons, g. w., 1.00; in paste, not otherwise specified, g. w., 0.50.—Christmas tree ornaments, l. w., 1.20.—Chromium sulphate, g. w., 0.002.—Chromogen, l. w., 5.00.—Chronographs, each, 20.00.—Chronometers, each, 20.00.—Church furnishings, free.—Cider, in bottles, 0.60 per litre; other containers, 0.50 per litre.—Cigars, l. w., 7.00; medicinal, not made of tobacco, l. w., 3.00.—Cigarettes, l. w., 10.00; medicinal, l. w., 3.00.—Cigarette paper, in sheets, l. w., 0.50; in casings, l. w., 1.00.—Cigar boxes, g. w., 0.06.—Cigar cases, with or without frames or lining, l. w., 6.00; not otherwise specified, 0.70.—Cinnamate, n. w., 5.00.—Cinematographs, l. w., 1.80.—Cinnabar, g. w., 0.30.—Cinnamon, whole, g. w., 0.10; ground, g. w., 0.15.—Clays, g. w., 0.02.—Cleaning preparations, paste, 0.25; powder, 0.30.—Clocks, table, l. w., 2.00; wall, g. w., 0.50.—Cloth, adhesive, l. w., 1.20; bolting, n. w., 6.00.—Clothing, cotton, cut out, but not made up, dutiable according to the fabric with a surtax of 25%; ready-made clothing, n. o. s., for men or boys, 3.25; for women, girls, and children, with cloth trimmings, 4.50; trimmed with openwork, lace or embroidery, 9.00; all n. w.; linen, cut out, but not made up, dutiable according to fabric with surtax of 25%; ready-made, n. o. s., for men and boys, 5.00; for women, girls or children, with cloth trimmings, 6.50; trimmed with openwork, lace or embroidery, 10.00; of linen net, tulle, or lace, 20.00; all n. w.;

of linen knit fabric, l. w., 3.50; paper, 2.60; silk, cut out, but not made up, dutiable according to fabric, with a surtax of 25%; ready-made, for men or boys, of wool or wool with silk threads, 13.00; with less than 90% silk, 25.00; over 90% silk, 50.00; of transparent fabrics containing silk, 80.00; of point, tulle, or lace, cotton or linen, with silk trimmings, 30.00; n. o. s., with mixed silk fabric, knitted; cotton, knit, ready-made clothing, with silk threads, 3.00; same of linen or wool, 5.00; silk water-proof, 12.00; all n. w.; wool, clothing, cut out, but not made up, dutiable according to fabric with 25% surtax; ready-made, n. o. s., for men and boys, 7.00; for women, girls or children, 10.00; of knit fabrics, 3.50; of rubber cloth, 7.00; all n. w.—Clothespins, g. w., 0.05.—Cloths, cleaning, l. w., 0.30.—Cloves, whole, g. w., 0.25; ground, g. w., 0.40.—Coal, not otherwise specified, free; moulded with other substances, g. w., per ton, 2.00. Cobalt, compound, n. w., 3.00.—Cochineal, g. w., 0.90.—Cocks, iron and steel, 0.10; copper, 0.50.—Cocoa, crude or bean, 0.10; shells, 0.05; ground or in cakes, 0.50; all g. w.—Cocoa butter, g. w., 0.20.—Coco-nuts, g. w., 0.40; copra, free.—Cod-liver oil, g. w., 0.20; mixed, g. w., 0.50.—Coffee, in beans, n. w., 0.10; husks, g. w., 0.02; ground and chicory coffee, 0.15; barley, malt, and acorn coffee, l. w., 0.40.—Coffee mills, g. w., 0.15.—Coffins, wood, 1.00; iron and steel, 0.60; aluminum, 4.00; all g. w.—Coins, free.—Coke, free.—Collargol, n. w., 40.00.—Collars, shirt, of all kinds, 3.00 per dozen.—Collections for museums, free.—Collodion, l. w., 0.50.—Compounds, for clarifying liquors; glue, 0.45; other, 0.60; both g. w.—Compositions, for coating barrels, g. w., 0.30; for hectographs, l. w., 0.70; for phonograph cylinders, l. w., 0.30; for cleaning, g. w., 0.25; for filtering, l. w., 0.20.—Confetti, g. w., 0.20.—Cookstoves, iron and steel, not enameled, g. w., 0.12; enameled, 0.15; portable, 0.20.—Cooperage, g. w., 20.00.—Copper, ore, crude, and sheets, bars or ingots, free; in bars or rods, for cutting bolts, g. w., 0.10; pure copper for assaying, n. w., 1.80; copper filling, shavings and solder; copper and alloy manufactures, n. o. s., 1.00; nickel-plated, 1.50; silver or gilded, 2.50; all l. w.—Copy presses, g. w., 0.15.—Coral, l. w., 5.00.—Cordage, articles of, l. w., 1.150.—Cords, cotton, twisted, l. w., 0.30; hemp, braided, l. w., 0.80; twisted, weighing from 5 to 75 grammes, per each 10 meters, 0.50; from 75 to 600 grammes, 0.35; over 600 grammes, 0.25; all g. w.; silk, dutiable as trimmings; wool, l. w., 3.00.—Corkscrews, l. w., 0.70.—Corn, g. w., 0.03.—Cornices, copper, g. w., 0.20; cement, g. w., 0.15.—Corsets, cotton or wool, per dozen, 25.00; silk, 144.00; laces, l. w., 0.90; stays, bone, l. w., 1.90; steel, 0.25.—Cosmetics, rouge, and face cosmetics, l. w., 6.00; for the hair, 5.00; depilatories, 3.00; all l. w.—Cotton; raw, free; seed, free; yarn and thread, twisted, 0.30; braided, 0.80; both l. w.; waste, g. w., 0.10; thread and yarn, for weaving, until December 31, 1920, free; in the following two years, l. w., 0.12; thread, n. o. s., l. w., 0.60.—Cotton fabrics, ticking for mattresses, n. w., 0.50; loosely woven, an dembrodering, n. w., 0.60, felt, n. w., 0.50; oilcloth, g. w., 0.25; rugs, g. w., 0.30; damask, n. w., 1.25; for furniture, curtains floor covering, except velvet and plush n. w., 1.25; gauze netting, and similar fabrics, n. w., 1.80; strips, embroidered, l. w., 4.50; plaited or scalloped, 1.80; n. o. s., for capes, n. w., 1.00; for towels, and bath sheets, n. w., 0.75; kitchen toweling, n. w., 0.75; knit fabrics, n. w., 1.25; rubber cloth, n. w., 0.65, bookbinders' cloth, n. w., 0.40; unbleached, n. o. s., weighing 60 grammes or more per square meter, and having 27 threads per square of five millimeters, n. w., 0.32; same having from 27 to 36 threads, 0.44; same over 36 threads, 0.62; weighing from 40 to 60 grammes per square meter, and with no more than 27 threads in a square of five millimeters, 0.62; same from 27 to 36 threads, 0.86; same over 36 threads, 1.10; weighing less than 40 grammes per square meter and not over 28 threads in a square of five millimeters, 0.85; same from 27 to 36 threads, 1.10; over 36 threads, 1.35; all n. w.; bleached and carded fabrics, n. o. s. are dutiable as the corresponding unbleached fabric with a surtax of 0.20 per kilo; fabrics, n. o. s., printed, dyed or colored, weighing 300 grams or more per square meter, 0.60; same weighing from 200 to 300 grams, 0.08; less than 200 grams, are dutiable as the corresponding unbleached fabric with a surtax of 0.66 per kilo, all n. w.—Courtplaster, 3.00.—Covers, for balls, 3.00; for bottles, straw, 0.20; for books, of cardboard, 0.40; not pasted on cardboard, 4.00; of pasteboard,

0.50.—Coverlets, 3.00.—Cows, reduced to 5.00 per head, during 1920 and 1921.—Crayons, for school use, 0.15.—Cream, for footwear, 0.50.—Creosotal, 5.00.—Cresol, 0.20.—Cringles, ships' g. w., 0.05.—Crown corks, 0.30.—Crystal or glassware, n. o. s., with mounting of common metal, other than nickel and alloys, plain, 0.40; with nickel or alloy mountings, not silvered or gilded, g. w., 0.80; with silver or gilded mountings, l. w., 2.20; with precious metal mountings, l. w., 6.00; crystal goods, n. o. s., g. w., 0.75.—Cylinders for phonographs, recorded, 2.50; blank, 1.50.—Cuffs, per dozen pairs, 4.20.

Daggers, with fancy handles, 9.00; others, 1.80; n. o. s., or with precious metal, 2.50 (all l. w.).—Dammargun, 0.05.—Decalcomanias, 1.50.—Degras, for tanning, 0.15.—Demijohns, not polished, 0.10; polished, 0.14.—Derricks, 0.05.—Detonators, g. w., 0.40.—Developers, photographic, l. w., 1.50.—Dextrine, g. w., 0.06.—Diamonds, n. w., 5 00 per gramme.—Dialase, 10.00.—Digalen, n. w., 25.—Di-iodoform, n. w., 25 00.—Disinfectants, powders, g. w., 0.20.—Divers' outfits, free.—Dominoes, of tortoise-shell, pearl, or ivory, 25.00; of other materials, 1.80; of bone, vegetable ivory, celluloid, or rybber, 3.50; all l. w.—Donkeys, 5 00 per head.—Doors, wood, g. w., 0.50; iron, for vaults, g. w., 0.30.—Doormats, g. w., 0.50.—Dermol, 5.00.—Dressing for harness, g. w., 0 12.—Dress shields, of rubberized cloth, without silk, 2.40; with silk, 6.00; both l. w.—Driers, for paint and varnish, g. w., 0 15.—Droppers, medicine, 1.50; in form of bottles, 0 40.—Drops, medicated, 3.60.—Drums, 1.80.—Duck, cotton or linen, weighing less than 350 grammes per square meter, 0.60; 350 grammes or more, 0.30; both n. w.; not specified duck manufactures, l. w., 0.75, hemp; weighing less than 350 grammes per square meter, 0.40; 350 grammes or more, 0.25; both n. w.; linen duck goods, n. o. s., l. w., 0.30.—Dyes, for leather, barberry, 0.18; others, 0.18.—Dyewoods, g. w., 0.02.—Dynamite, g. w., 0.08.

Earths, n. o. s., not used as pigments, g. w., 0.02; for smelting furnaces, free; used in paints or colors, g. w., 0.05; Fuller's earth, l. w., 0.15.—Edinol, n. w., 12.00.—Eggs, in natural state, 0 20; yolks, 0.15.—Elkonogen, n. w., 5.00.—Elastic, with linen or cotton, more than 12 cm., 0.60; not more than 12 cm., 1.80.—with silk, not more than 12 cm., 1.00; more than, 8 00; with wool, more than 12 cm., 0.60; not more, 3.00; all l. w.—Elatine, n. w., 0.25.—Electrical supplies, 0 04.—Elevators, freight, g. w., 0.05.—Embroideries, n. o. s., cotton, 4.50; for military use, with gilded or silver threads of common metal, 12.00; with silver, 24.00; all l. w.—Emery and Tripoli, g. w., 0.05; emery wheels, g. w., 0 02; emery cloth, n. w., 0.75.—Emeralds, 5.00 per gram.—Emetine, 0.15.—Enamel, 0.50.—Engines, automobiles, 0.10.—Envelopes, paper for, 0 30; mourning paper for, 1.00.—Epaullets, 6.00 per pair.—Ergot of rye, 0.75.—Ergotine, 3 60; in solution, 5.00.—Essences for flavoring, 3.00.—Ethers, for industrial uses, l. w., 3.00; acetic, butyric, formic, nitric, and sulphuric, n. w., 0.50; hydrobromic, n. w., 1 25; vinic and hydrochloric, l. w., 3.00; hydriodic, l. w., 6.00.—Eucalyptol, 1.25.—Evonimine, n. w., 10.00.—Explosives, 0.08; caps for, 0.40.—Extracts, dyewood, g. w., 0.15; meat, 2.60; perfume, and flavoring, 10.00; tanning, 0.02; not otherwise specified, 3.60.—Eyes, artificial, 25.00.—Eyeglasses, 2.50.—Eyelets, iron and steel, l. w., 0.70; other metals, with celluloid, 1.20; without celluloid, 0.80; all l. w.—Eye shades, 12.00.

Fans, of ivory, etc., 25.00; not otherwise specified, 3.00.—Fasteners, for clothing, 1.50.—Fats, edible, 0 18.—Faucets, iron, 0.10; copper, 0.50.—Feather dusters, 1.60.—Feathers, for dusters, pillows, etc., l. w., 1.20; ornamental, l. w., 20.00.—Felt, cotton, 0.50; wool, weighing over 300 grammes per square meter, 0.60; not over 300 grammes, 1.80; brims or round frames, for hats, l. w., 3.00; felt pads, for garments, l. w., 1.80; others, tarred, l. w., 0.10; not tarred, l. w., 0 50.—Fencing, wire, 0.05.—Fencing supplies, gloves, 3.00; masks, 2.00.—Ferments, 0.05.—Ferrycyanide, and Ferrocyanide, 0.10.—Fertilizers: per 100 kilos, phosphate, 2.00; agricultural, free.—Fibers, pussava, esparto, etc., for brushes, g. w., 0.03.—Field glasses, binocular, 5.00; prismatic telescopes, each 15 00.—Films, on celluloid, 6.00; photographic films, 0.30.—Filter paper, 0.25.—Filters, stone, g. w., 0.05; n. o. s., l. w., 0.15.—Fire clay, free.—Fire extinguishing apparatus, free.—Fireworks, 0.50.—Fishplates, 0.02.—Fish products, free.—Fixers, photographic, 1.50.—Flasks, pocket, glass or crystal, with covers of straw or cane, l. w., 1.50; with covers of other materials

pay duty according to the material, subject to the highest rate (see also bottles)—Flags, 2.00; for official use, free.—Flax, raw, free.—Flaxseed, 0.03.—Flooring, 0.50.—Flour, wheat, 0.02; others, 0.15.—Flowers, artificial, wax, l. w., 6.00; silk, l. w., 8.00; paper, 3.00; artificial, plain parts, 8.00; both l. w.; fresh, free; medicinal, g. w., 0.60.—Fluorides, 1.00.—Foil, metal, brass, 2.50; gold, per gram, 0.04; lead, 0.20; platinum, per gram, 0.04; silver, per gram, 0.04; tin, 0.20; other, 4.00.—Footballs, l. w., 3.00.—Footwear, leather, boots, for men, up to 45 centimeters height, 72.00 per dozen; over 45 centimeters, 120.00; shoes, with soles not exceeding 16 centimeters long, 6.00; from 16 to 22 centimeters long, 36.00; exceeding 22 centimeters, 60.00; n. o. s., of leather or other material not containing silk, with soles up to 16 centimeters, 4.80; from 16 to 22 centimeters, 9.60; over 22 centimeters, 15.00; all duties are per dozen; silk shoes pay as leather; low shoes and slippers, with fiber soles, n. w., 1.20; rubber shoes, n. w., 2.00; wooden shoes, 6.00 per dozen.—Forage, per 100 kilos, 1.25.—Forks, l. w., 0.70.—Formaldehyde, g. w., 0.15.—Formalin, g. w., 0.15.—Formol, g. w., 0.15.—Fountain pens, 1.50.—Frames, door, wood, 0.50; iron, 0.20.—Frames, umbrella, wood, g. w., 0.20; iron, 0.10.—Freezers, ice-cream, 0.18.—Fucssine, 1.20.—Furfurol, n. w., 10.00.—Furnaces, assay, free.—Furniture, n. o. s.; willow, cane or reed, 0.80; common or bent wood, 0.50; veneered, 0.70; of fine wood, 1.00; upholstered, of common wood, 0.80; veneered, 1.20; gilded, lacquered, with inlaid work or without ornaments, or silk fabric, 1.50; iron, 0.50; all g. w.—Furs, fine, tanned or prepared, n. w., 6.00; not otherwise specified, n. w., 20.00.—Fuses, electric, 0.04.—Fuses for mines, 0.05.

Gall nuts, l. w., 0.30.—Game bags, n. w., 2.20.—Garters and suspenders, cotton, 3.50; linen, 4.00; wool, 4.00; silk, 14.00; all l. w.—Gas mantles, 3.00; gas supports, 1.50.—Gas meters, 0.20.—Games and accessories, n. o. s.; of tortoise-shell, ivory, pearl, or imitation, 25.00; of bone, vegetable ivory, celluloid, or rubber, 3.50; other materials, 1.60; all l. w.—Gelatine, g. w., 0.30.—Girths, 1.50; wool, 3.00.—Glassware, (see, crystal and glassware); photographic, 0.10; tubing, 0.05; waste, 0.01; window, neither colored nor frosted, not exceeding 4 millimeters in thickness, 0.04; over 4 millimeters in thickness and up to 60 centimeters long, 0.12; over 80 centimeters, 0.18; curved and beveled glass, 0.30; decorated in colors, 0.70; plain glass, n. o. s., 0.20; glass for paving, skylights and tiles, 0.06; glass articles, n. o. s., cut, polished, edged and decorated, 0.20; all g. w.—Globes, geographical or celestial, free.—Globes, for gardens, 0.30.—Globules for pills, 3.50; homeopathic, 1.20.—Glucose, g. w., 0.10.—Glue, adhesive, g. w., 0.30; Clarifying, 0.45; liquid, l. w., 0.30; fish and sterilized, l. w., 4.00.—Glove stretchers, 3.00.—Gloves, asbestos, 2.00; boxing, 3.00; fabric, cotton, knit, heavy, 4.00; fine quality, 0.08; linen, other than lace, 0.08; wool, 0.06; silk, 0.24; friction, 2.50; leather, not lined, 25.00; lined, 15.00.—Glycerin, g. w., 0.25.—Glycin, 10.00.—Goatskins, kid skins, whole, n. o. s., 5.00.—Goats, 1.00.—Goggles, 1.00.—Gold, raw and ore free; gold amalgam, 0.05 per gram; compounds, per gram, 0.25; leaf, l. w., per gram, 0.04; gold twist tinsel, wire, threads and spangles, 0.30 per gram.—Gramophones, 1.80.—Granite, in slabs, 0.02; not otherwise specified, 0.20.—Grapite, per 100 kilos, 1.50.—Greases, lubricating, mineral grease, g. w., 0.12; pine tar, g. w., 0.02; medicated, 3.50.—Grindstones, 0.02.—Guayacol, liquid and crystallized, 2.00; n. o. s., 5.00; benzoate and valerate, 10.00; all n. w.—Guitars, with inlaid work, l. w., 3.50; without, l. w., 1.80.—Gums; arabic, copal, damar, sandarac, lac, Senegal, tragacanth, and mastic; 0.05; medicinal, scammony, jalap, refined gutta-percha and turpeth, 4.50; catechu and incense, 0.20; n. o. s., 0.60; all l. w.—Gun cotton, 0.80.—Gutta-percha, (see, rubber).—Gutters, iron, 0.10; zinc, 0.20.—Gymnasium apparatus, 0.45.—Gypsum, raw, g. w., 0.02; pure, for dentists, l. w., 0.15; slabs or bricks for building, g. w., 0.10; gypsum goods, g. w., 0.40.

Hair, human, l. w., 25.00; animal, g. w., 0.10; human hair manufactures, l. w., 0.60; vegetable hair, g. w., 0.06.—Haircloth, 3.00.—Hames, harness, 0.15.—Hammers, piano, 0.20.—Hammocks, l. w., 1.50.—Hampers, fitted, g. w., 0.90.—Hams, g. w., 0.50.—Handles, for locks or furniture; white metal, gilded or silvered, 2.50; others, 0.60, tools, less than 150 grams, 0.25; over 150 grams, 0.15; of common metal, gilded or silvered, 2.50; nickel-plated, 1.00; both g. w.;

umbrella, l. w., 0.20.—Hands, for watches, l. w., 6.00; for wall or table clocks, l. w., 3.00.—Handkerchiefs, cotton not embroidered, 1.50; embroidered in one corner without silk, 2.50; embroidered or trimmed with lace, 6.00; embroidered with silk, 9.00; linen, without embroidery, 4.80; embroidered in one corner without silk, 7.20; with embroidery or lace trimming, without silk, 12.00; trimmed or embroidered with silk, 8.00; silk, with less than 20% silk, 7.00; from 20 to 90% silk, 18.00; over 90%, 36.00; of lace, 70.00; wool, 3.60; not otherwise specified, 2.50; all n. w.—Hartshorn, chips, 0.10; calcined, 0.40.—Hat bands, leather, 2.00; cotton cloth, 3.50; mourning, 3.00; paper, 0.60; all l. w., straw or wood, 0.40; silk or horsehair, 12.00; hat brims and crowns, cotton, 1.20; hat felt, 3.00; all l. w.; hat buckram shapes, 2.40; hat linings, cotton, 1.80; silk, 10.00; all l. w.—Hats (per dozen); cotton, men or boys, 4.80; for women and girls, trimmed, 12.00; untrimmed, 6.00; felt and beaver, for clergy or military, and high hats, 30.00; of hair felt, 24.00; of wool felt, 12.00; of either or both materials, trimmed, for women or girls, 30.00; horsehair, for men, 12.00; for women, untrimmed, 12.00; trimmed, 36.00; linen, for men, 4.80; for men and girls, trimmed, 12.00; untrimmed, 6.00; silk, trimmed, 84.00; untrimmed, 39.00; reed, palm leaf or matting, 1.50 per kilo; straw, for women or girls, (per dozen) trimmed, 18.00; untrimmed, 6.00.—Hawse holes, 0.05.—Hay, per 100 kilos, 1.25.—Heels, not covered, 0.60; covered, 1.20.—Heliotropine, 2.50.—Hemp, g. w., 0.02; hemp yarn, soft twisted single strand, 0.20; twisted, of two or more strands, l. w., 0.80; hemp fabrics, plain or twilled, n. o. s., n. w., 0.60; others, 1.20; hemp seed, g. w., 0.03.—Herbs for compounding liquors, 0.90.—Hides, untanned, free; not otherwise specified, 2.50.—Hides and skins; with hair, untanned, tanned, 1.80; kid skins, box calf, 5.00; n. o. s., 2.50.—Honey, g. w., 0.10.—Hoops, wood, 0.02; iron, 0.01.—Hops, g. w., 0.10.—Horse blankets, hemp, jute, etc., n. w., 0.60; cotton, l. w., 0.60; wool, n. w., 1.50; horse hair, g. w., 0.40; horsehair fabrics, n. w., 3.00; surgical horsehair, l. w., 5.00.—Horses, 10.00 per head.—Horseshoes, 0.10.—Horseshoe nails, 0.12.—Hose, rubber, 0.40; duck, 0.60.—Hound's tongue, whole or powdered, l. w., 5.00.—Houses, free.—Hydroquinone, 2.00.—Hypodermic injections, l. w., 10.00.

Ice, free.—Ichthyol, 5.00.—Incense, l. w., 0.20.—Indigo, 1.80.—Ingluvin, 6.00.—Inhalers, 1.50.—Inks; printing, lithography and telegraphy, g. w., 0.10; common, for writing, or copying, g. w., 0.12; writing, white or red, l. w., 0.50; marking, stamping, or multi-graphing, l. w., 0.70; in paste, n. o. s., g. w., 0.25; India and imitation, in paste, l. w., 2.50; India, liquid, l. w., 1.00.—Insecticides, g. w., 0.20.—Insoles, electric, l. w., 6.00.—Instruments, musical, percussion, l. w., 1.80; wind, n. o. s., 3.00; string, played with bow, n. o. s., 3.00; instruments, n. o. s., 1.80, all l. w.; scientific, free; telegraph, 0.05; telephone, 0.05. (See, pianos, guitars and organs.)—Insulators, 0.04.—Invoices, printed, 2.00.—Iodine, n. w., 5.00.—Iron and steel, bars, not painted, 0.01; painted, 0.10; for buildings, ridge pieces, 0.10; sheet irons, 0.20; ornamental, 0.20; ore, free; scrap, and filings, free; filings, 1.20; stamped, 0.20; structural, 0.06.—Iron, medicinal, l. w., 3.60.—Iron paint, 0.12.—Iron and steel manufactures, n. o. s., silver plated or gilded, l. w., 2.50; enameled, of wrought iron, g. w., 0.25; cast iron, g. w., 0.15; with parts of pearl, ivory, or tortoise-shell, l. w., 8.00; with celluloid or imitation ivory, (except knives), l. w., 1.50; same coated with copper, tinned, galvanized or painted, of wrought iron, 0.18; fine or odd castings, 0.18; other castings, 0.12; all g. w.; manufactures, plated with nickel or aluminum, are dutiable at rates for same articles without plating, plus 50%; manufactures of wire or wire cloth, silver plated or gilded, l. w., 2.50.—Iron compounds, chromogen, l. w., 5.00; carbonate, ammoniachloride; chlorides, phosphate, lactate, black oxide, saccharate, pure sulphate, and ammonia sulphate, l. w., 0.30; glycirophosphate, hypophosphite and citrate, l. w., 3.00; cacodylate, iodide, n. w., 5.00; acetate and sulphide, g. w., 0.05; red oxide, and magnetite, g. w., 0.10; impure sulphate, g. w., 0.01; n. o. s., 1.00.—Issue peas, l. w., 2.00.—Ivory, manufactures, n. o. s., l. w., 20.00; vegetable, manufactures, l. w., 2.00.

Jack pins, l. w., 0.05.—Jackscrews, 0.05.—Jalap, 4.50.—Jars, earthenware, g. w., 0.05; battery, g. w., 0.10.—Jasper (see, marble).—Jelly preparations, 1.00.—Jerked beef, g. w., 0.50.—Jewelry; gold

and platinum, without pearls or precious stones, (per gram) 0.10; with pearls or precious stones, 0.60; silvered, without gems, 0.02; with gems, 0.60; imitation (per kilo), with pieces of tortoise-shell, ivory or pearl, 7.00; gilded or silvered, 7.00; not gilded or silvered, 2.50; all l. w.—Journal boxes, 0.10.—Juice, fruit, 0.25.—Jute, raw, g. w., 0.02; yarns, soft twisted, g. w., 0.10; jute fabrics, (see, hemp fabrics).

Kamala, n. w., 3.00.—Keys, l. w., 0.50.—Keys, piano, 2.50.—Key-hole guards, l. w., 1.80.—Key rings, l. w., 1.50.—Knives; kitchen and butcher, l. w., 0.50; iron and steel, for tables, 0.70; with parts of celluloid or imitation ivory, 1.80; for sailors, 0.60; all l. w.—Knit goods, fabrics, n. w., 1.25.—Kola, l. w., 2.00; kola nuts, 0.30.

Labels, stamped on cotton or linen cloth, 3.50; on paper, 5.50; of glass, 6.00; all l. w.—Laces and pleatings, cotton, l. w., 0.08; linen, 16.00; silk, 0.75; all l. w.—Lactogol, 3.00.—Lactucarium, 5.00.—Lake, caminated, g. w., 0.90.—Luminaria, 5.00.—Lampblack, g. w., 0.05.—Lamps; oil, iron and steel, g. w., 0.15; copper and alloys, not varnished, tinned or painted, g. w., 0.40; nickel plated, l. w., 0.60; glass, plain, 0.10; with base of lead, pewter or copper, 0.25; with base of nickel, white metal, or silver alloys, 0.60; with base of other material, n. o. s., 0.15; all g. w.; with silvered or gilded base, dutiable with surtax of 50%.—Lamps, arc, g. w., 0.04; electric, g. w., 0.18; electric of iron or steel, 0.70; incandescent, 0.04; for carriages, neither silvered nor nickeled, 2.50; silvered or nickeled, 6.00.—Lamps, weights for, of iron, 0.18; of tin, lead, etc., 0.10.—Lamp wicks, 0.75.—Lanolin, 0.75.—Lanterns, l. w., 0.50. Lard, 0.25. Largin, 40.00.—Laths, rough, 0.02; painted, 0.06.—Laurel oil, 0.20.—Lavatories, 0.12.—Lead, ore, bar or sheet, free; granulated filings or shavings, g. w., 0.25; powdered, 1.20; lead manufactures, n. o. s., 1.00; nickel plated, 1.50; silvered or gilded, 2.50; leaf, 0.04; all l. w.—Lead compounds, acetate, 0.10; chloride and nitrate, 0.20; pure carbonate, 0.40; iodide, 3.00; n. o. s., 1.00; all n. w.—Leather manufactures, (or lined with leather) n. o. s., l. w., 3.00; leather cut in pieces for footwear, n. w., 8.00.—Leather (see, hides).—Lecithin (lecithol) l. w., 25.00.—Leches, free.—Lenses, l. w., 2.00.—Lichens, l. w., 0.15.—Lime, g. w., per 100 kilos, 0.40.—Lumber, building, rough or merely sawed, 0.30 per square metre; worked, 1.00 per square metre; veneer for furniture, 0.10 per kilo, g. w.; cabinet woods, 1.00 per square metre.—Linen, raw, free; yarn, n. w., 0.60; Linen fabrics, and strips or bands with threads not containing silk, l. w., 4.50; fabrics, n. o. w., plaited, scalloped, or embroidered in chain, without silk, n. w., 1.80; fabrics for towels, and bath sheets, n. w., 0.80; knit fabrics, n. w., 1.25; unbleached fabrics, n. o. w., mixed or not with wool in a proportion of less than 10% wool, containing not over 8 threads in a square 5 millimetres to the side, 0.10; same from 8 to 18 threads, 0.60; same from 18 to 30 threads, 0.90; same over 30 threads, 1.40; same, bleached, dyed, printed, or colored, having not over 30 threads, 1.40; same over 30 threads, 2.60; fabrics, figured, or other than plain or twilled, n. o. s., 2.00; all n. w.—Linoleum, g. w., 0.15.—Linseed oil, g. w., 0.23.—Lint, for medicinal use, l. w., 0.50.—Liquors, per litre, in bottles, 2.50; other containers, 2.00 (See, Wines).—Litharge, l. w., 0.08.—Lithium, compounds of, n. w., 3.00.—Lithographic stones, g. w., 0.03.—Litmus, unmanufactured, 0.20; paper for chemical reaction, l. w., 2.00.—Locomotives, g. w., 0.03.—Logwood extract, 0.15.—Lubricants, mineral, for machinery, 0.03; mineral grease, 0.12; pine tar, 0.02; n. o. s., 0.20; for belting, g. w., 0.25; all g. w.—Lubricators, l. w., 0.10.—Lupuline, n. w., 1.25; Lycopodium, l. w., 1.00.—Lysoform, g. w., 0.20.—Lysol, g. w., 0.20.

Machines, adding, l. w., 0.50; agricultural, g. w., 0.03; cinematograph, l. w., 1.80; copying, l. w., 0.50; generating, g. w., 0.04; industrial, g. w., 0.03; photographic, l. w., 0.60.—Magazines, free.—Magnesia, l. w., 1.80.—Magnesium, metallic, n. w., 5.00; oxide, calcined, l. w., 0.25; carbonate and pure chloride, l. w., 0.10; impure chloride, g. w., 0.03; compounds, n. o. s., n. w., 1.50.—Mahogany, per square meter, 1.00.—Majolica, g. w., 0.40.—Malt, n. w., per 100 kilos, 1.65.—Maltine, n. w., 10.00.—Manganese peroxide, g. w., 0.03; sulphate, g. w., 0.10; borate, carbonate and chloride, l. w., 0.20; acetate, l. w., 0.75; n. o. s., n. w., 2.50.—Manikins, with head, 1.50; without head, 0.60; both l. w.—Manna, g. w., 0.75.—Mankies, gas, l. w., 3.00.

—Maps, free.—Marble, same duties as Alabaster.—Margarine, 0.30. Mastic, l. w., 0.05.—Mats, chinese, 0.25; door, g. w., 0.50.—Matches, g. w., 0.40.—Matting for furniture, n. w., 1.80.—Mattresses, iron and steel, l. w., 0.40; filled with feathers, with silk cover, 6.00; same without silk cover, 3.00; both n. w.—Meat and products, 0.20; extracts, 2.00; canned meats, 0.80 (All are g. w.).—Measures, length, for professional people, l. w., 0.80.—Medals, l. w., 2.50.—Medicine chests, l. w., 1.20.—Meerschaum, rough, n. w., 40.00; manufactured in goods, n. o. s., n. w., 70.00.—Memorandum books, l. w., 1.80.—Menthol pencils, l. w., 3.00; pure, 5.00; benzoate and valerate, 18.00; both l. w.—Mercury, free; chalkstone, 0.90; acetate, benzoate, bromide, oxycyanide, and salicylate, 2.50; bichromate, iodide, and naphtholate, 0.04; cacodylate, 8.00; salts, n. o. s., 1.00; all n. w.—Meters, 0.20.—Methol, n. w., 10.00.—Methyl arsenate, n. w., 500.—Methylene, g. w., 0.20.—Metronomes, each, 2.40.—Mica, in sheets, g. w., 0.60; manufactures, 0.75.—Milk, fresh, 0.08; sterilized, 0.20; condensed or evaporated, 0.40; all g. w.—Milk cans, 0.15.—Milk sugar, g. w., 0.25.—Millstones, 0.01.—Millwork for buildings, 0.50.—Mills, coffee, 0.15.—Mirbane, 0.15.—Mirrors, glass, not over 80 centimeters long, with wood, pasteboard, pulp, zinc, iron, or tin frame, 0.30; with frames of copper, bronze, or brass frame, 0.80; with frame of nickel, white metal, argentan, celluloid, or silver plated, 1.25; exceeding 80 centimeters long, 0.70; plate glass, silvered, not over 80 centimeters long, 0.35; over 80 centimeters, 0.70, all g. w.—Models, scientific, free.—Molasses, 0.05.—Moldings, wood, in the white, 0.30; gilded, silvered or varnished, 0.50; of sawdust composition, 1.00; cement, 0.15; all g. w.—Molybdate, n. w., 5.00.—Morocco leather, 5.00.—Moss, 0.30.—Mother-of-pearl, manufactures of, not otherwise specified, 3.00.—Motorcycles, l. w., 1.50.—Motors: aeroplane, free; industrial, n. o. s., 0.04; automobile and truck, 0.10, all g. w.—Mouth organs, g. w., 0.70.—Mules, 10.00 per head.—Mucilage, see glue.—Mufflers, see Shawls.—Mushrooms, dry, 0.20; n. o. s., 0.10, fresh, 0.05; all g. w.—Music boxes, g. w., 0.70.—Music paper, l. w., 0.30.—Music, printed, n. w., 0.15.—Music records, 1.60.—Musk, natural, n. w., 0.20; artificial, n. w., 8.00.—Mustard plasters, l. w., 1.20.

Nails and tacks: iron and steel, wire, up to 25 millimeters long, 0.16; over 25 millimeters, 0.10; cut up to 25 millimeters, 0.16; over 25 millimeters, 1.06; with heads of other material, or covered with leather, up to 25 millimeters, 0.45; over 25 millimeters, 0.35; horse-shoe, 0.12; copper, plain, 0.50; nickel plated, 0.75; silvered or gilded, 1.20; special for boats, 0.05; tarpaulin, 0.07; zinc, 0.16, all g. w.—Napkins, see Tablecloths.—Naphthalene, g. w., 0.05.—Naphthol, n. w., 0.50.—Naphtholate, n. w., 4.00.—Neckties, l. w., 6.50.—Neckties: cotton or linen, for men, 6.50; wool, 10.00; silk, 30.00, all l. w.—Needles, for musical instruments, l. w., 3.00; sewing, etc., l. w., 0.10.—Nerolin, n. w., 5.00.—Neurosine, l. w., 2.00.—Newspapers, free.—Nickel compounds: sulphate and ammoniosulphate, 0.25; n. o. s., 2.00; all n. w.—Nickel, bars, sheets or plates, g. w., 0.25; manufactures, not otherwise specified, silvered or gilded, l. w., 8.00; not silvered or gilded, l. w., 3.00; mechanical appliances, n. o. s., l. w., 2.50.—Nitrobenzine, g. w., 0.15.—Nitroglycerine, l. w., 1.25.—Nitroprusside, sodium, n. w., 5.00.—Nutmegs, l. w., 0.30.—Nuts, iron, g. w., 0.10.—Nuts, g. w., 0.20; gall, kola, nutmegs, l. w., 0.30.—Nux vomica, l. w., 0.30.

Oars, 0.50 each.—Oats, g. w., 0.10.—Ochers, g. w., 0.05.—Oil cans, l. w., 0.10.—Oil paints, l. w., 1.20.—Oilcloth, cotton, g. w., 0.25; paulinia, n. w., 3.00.—Oils, medicinal: almond, cod liver, cade, castor, laurel, and vaselline, g. w., 0.20; cod liver, combined with other substances, g. w., 0.60; n. o. s., l. w., 1.00.—Oils, edible, oleomargarine, g. w., 0.30; n. w., 0.25; illuminating, g. w., per 100 kilos, 3.00; linseed, g. w., 0.25; n. o. s., g. w., 0.20.—Ollstones, g. w., 0.30.—Ointments, l. w., 1.20.—Olein, g. w., 0.10.—Opera glasses, with mounting of precious metal, 30.00; others, 15.00.—Opium, in powder, 8.00; extracts, 12.00.—Orexine, n. w., 25.00.—Organs, g. w., 0.70.—Ornaments, architectural, gypsum, 0.40; porcelain, not enameled, 0.10; enameled or mosaic, 0.25; all g. w.; sweet paste, l. w., 2.50; terracotta, 0.60; porcelain, 0.40; all g. w., funeral, iron and steel, l. w., 0.50; wreaths, and n. o. s., l. w., 15.00; glass, g. w., 0.30; marble or metal, g. w., 0.30; paper, g. w., 0.35; silver, n. w., 0.05 per gram; straw, l. w., 1.20; wood, see Mouldings.—Ornaburg, cotton, not over 15 threads to square of 5 millimetres to the side, n. w., 0.20, for bags, 0.25.—

Orpiment, 0.15.—Orthopedic apparatus, l. w., 3.60.—Ortol, n. w., 10.00.—Oxygen, g. w., 0.50.

Pack animals, free.—Padlocks, l. w., 0.50.—Pads, shoulder, or clothing, l. w., 0.36; woolen for garments, l. w., 1.80.—Paints and colors: water, or oil, liquid, in paste or solid, n. o. s., 0.09; special for iron, 0.12; for ship bottoms, 0.30; with alcohol or varnish, and enamel, 0.50; in lumps or powdered, indigo, 1.80; prussian and ultramarine blue, 0.10; vermilion, 0.30; zinc white, 0.01; cochineal and lake, 0.90; all g. w.; colors in tubes for oil paintings, or water color, 1.20; in small cakes for schools, 0.60; alizarine, fuschine, aniline, and other coal tar colors, 1.20; carmine, 7.50; all l. w.—Paintings, for public exhibition, free; others, g. w., 1.00.—Palm honey, g. w., 0.10.—Palm seed, free.—Paper: insect and toilet, g. w., 0.20; book-binding, box covering, etc., l. w., 0.10; silk or rice, for copying or decorating, l. w., 0.50; blank for drawing or oil painting, l. w., 0.30; carbolic, tracing, glacier, albuminized and sensitized for photography, l. w., 1.50; cross section for drawing and blue print, l. w., 0.50; for mimeographic copies, l. w., 3.00; with perforated borders, or prepared for decorating, l. w., 2.00; varnished and glazed on one side, n. o. s., imitation gilded or silvered, l. w., 0.35; any other color, l. w., 0.25; gilded or silvered, loose, l. w., 1.25; pasted upon cardboard, l. w., 0.60; n. o. s., dyed in the pulp or of natural color, l. w., 0.20; blotting or filtering, l. w., 0.20; Alaska, and similar paper, l. w., 0.40; n. o. s., white or light cream color, containing no animal glue, containing mechanical wood pulp, and that coated on both sides, free; not containing mechanical wood pulp, g. w., 0.10; n. o. s., containing animal glue, l. w., 0.20; n. o. s., ruled, l. w., 0.30; with monograms or ornaments, and printed blanks, l. w., 2.00; mourning writing paper and gilded edge paper, with envelopes to match, l. w., 1.00; printed, n. o. s., dutiable at rates for corresponding class, plus 25% surtax.—Paper pulp, per 100 kilos, 0.50.—Papier-maché, l. w., 1.20.—Parchment, n. w., 5.00.—Paraffin, g. w., 0.05.—Paraldehyde, n. w., 0.60.—Paris green, n. w., 0.25.—Parts for repair are dutiable as the machines they belong to.—Pastry, g. w., 0.50.—Paullinia, n. w., 3.00.—Peanuts, g. w., 0.01.—Pearls, n. w., 5.00 per gram.—Pedals, for pianos, l. w., 0.20.—Pegs, for shoes, g. w., 0.10; for musical instruments, of ivory, 2.50; of other kinds, 0.50.—Pencils, l. w., 0.02; for mechanics, 2.50.—Pen and pencil holders, iron, 1.50; nickel, plain, 2.50; gilded or silvered, 7.00; all l. w.—Pens, l. w., 0.50.—Penknives, with ivory, per dozen, 4.00; with other materials, 1.20.—Pepper, whole, g. w., 0.25; ground, 0.40.—Pepsin, n. w., 2.50.—Peptone, n. w., 2.50.—Perforators, check, l. w., 1.25; iron, nickel, l. w., 2.50.—Perhydrol, n. w., 6.00.—Periodicals, free.—Petroleum, crude, 0.05; for illuminating purposes, per 100 kilos, 3.00.—Phenocoll, n. w., 20.00.—Phonographs, n. w., 1.80; phonograph needles, 3.00; cylinders, black, 1.50; recorded, 2.50; discs, blank, 3.00; recorded, 5.00; all l. w.—Phosphorus, l. w., 0.20.—Photographic supplies, albums, tortoise-shell covers, 8.00; not otherwise specified, 2.00; amber varnish, l. w., 1.20; machines and apparatus, l. w., 0.60; mounts, l. w., 0.60; paper, l. w., 1.50; pins, wood or metal, g. w., 0.05; plates, g. w., 0.10; (See films and also chemicals, under respective names).—Pianos, upright, 0.50; grand, 0.70; players, 0.70; all g. w.—Pictures, not framed, 2.50; framed, 1.50; for schools, free (See also Paintings).—Pill boxes, l. w., 1.00.—Pills, l. w., 3.50.—Pillars, iron, g. w., 0.06.—Pillows, see Mattresses.—Pillowcases, cotton, 3.50; linen, without openwork, lace or embroidery, 2.50; with openwork, lace or embroidery, 5.00; all l. w.—Pins, l. w., 0.70; Jack pins, 0.05.—Piperadine, n. w., 15.00.—Piperine, n. w., 15.00.—Pipes and fittings, earthenware, 0.04; brass and copper, 0.20; for steam boilers and condensers, 0.05; iron: draining, 0.10; cast iron, 0.02; wrought iron or steel, 0.03; steel iron, 0.15; tin and lead, 0.06; zinc, 0.20; all g. w.—Pipes, smoking: wood, 4.00; gypsum, g. w., 0.40; earthenware, l. w., 1.00; porcelain and glass, l. w., 2.00.—Pistols and revolvers: with fancy handles, and those of Browning, Colt, or similar makes, 15.00; n. o. s., 10.00; both l. w.—Pistachio nuts, g. w., 0.40.—Pitch, vegetable, burgundy, l. w., 0.15.—Pitchers, g. w., 0.05.—Plants, (See Flowers).—Plasters, medicinal, in paste, 0.90; on cloth, paper, leather, 3.00; mustard, 1.20; all l. w.—Plaster of Paris, see Gypsum.—Plates, iron, railway, g. w., 0.02.—Platinum and manufactures, pay same duty as gold and manufactures.—Platinum compounds; chloride, free; n.

o. s., n. w., 0.10.—Plumbing supplies: iron and steel, g. w., 0.10; copper and brass, g. w., 0.50; porcelain, g. w., 0.12.—Plumbago, g. w., per 100 kilos, 1.50.—Polish, liquid, for carriages and harnesses, g. w., 0.12; see also Shoepolish.—Pomades, l. w., 1.20; for cleaning, g. w., 0.25.—Porcelain, see Chinaware.—Potash, caustic, l. w., 0.15.—Potassium, n. w., 12.00.—Potassium compounds: ferricyanide and ferrocyanide, g. w., 0.10; bicarbonate, pure caustic potash, pure chipride, neutral oxalate, sulphate, and sulphite, l. w., 0.15; cyanide, bichromate, carbonate, nitrate, and solid silicate, g. w., 0.05; chlorate, impure chloride, silicate, liquid, and chromium sulphate, g. w., 0.02; glycerophosphate, hypophosphate, guaiacolsulphate, and valerate, n. w., 2.00; iodides, n. w., 3.00.—Powders, disinfectants, g. w., 0.20; explosives, powder for mines, g. w., 0.10; smokeless, g. w., 1.40; n. o. s., g. w., 0.12; insect, g. w., 0.02; jelly, l. w., 2.00; for cleaning metals, g. w., 0.30; peptonizing, l. w., 2.50; talcum, l. w., 0.75; toilet, scented, l. w., 3.00; not perfumed l. w., 0.75.—Powder puffs, l. w., 5.00.—Preparations, albuminous, g. w., 1.80.—Presses, copying, l. w., 0.56.—Projectiles, free.—Printing supplies: wood type and vignettes, 0.90; type metal, 0.15; supplies and parts, n. o. s., 0.03; all g. w.—Propylamine, n. w., 2.00.—Provisions for ships, free.—Prunes, g. w., 0.40.—Pulleys, 6.00.—Pulp, paper, g. w., per 100 kilos, 0.50.—Purpice stone, rough or ground, g. w., 0.05; made up into bricks or other shapes, g. w., 0.10.—Pumps, fire extinguishing, free.—Punches, l. w., 1.20.—Purses, l. w., 6.00.—Pyridine, n. w., 2.50.—Quassia cups, l. w., 1.50.—Quills, l. w., 2.00.—Quilted fabric, n. w., 6.00.—Quilts: cotton, filled with feathers, 1.60; with other material, 0.70; fur, 5.00; silk, filled with feathers, 10.00; with other material, 6.00; wool, filled with feathers, 2.50; with other material, 1.50; all n. w. (See also Bedspreads).—Quinine, n. w., 10.00.—Rackets, l. w., 3.00.—Rags, free.—Railings, iron, g. w., 0.20.—Rails, g. w., 0.01.—Railway materials: brakes, g. w., 0.10; chains, coupling, g. w., 0.10; journal boxes, g. w., 0.10; plates, g. w., 0.02; platforms, revolving, g. w., 0.10; springs, g. w., 0.10; structural iron, g. w., 0.06; switches, g. w., 0.10; turntables, g. w., 0.10.—Raincoats, cotton, n. w., 6.00; wool, n. w., 7.00.—Resins, pine, industrial, g. w., 0.15; n. o. s., l. w., 0.60; see also under special names.—Raisins, g. w., 0.40.—Razors, per dozen, with tortoise-shell, ivory, or pearl handle, 12.00; n. o. s., 3.00; safety, 12.00.—Reagents, photographic, l. w., 1.50.—Reed for furniture, g. w., 0.05; Reed manufactures, n. o. s., l. w., 1.00.—Reflectors, glass, g. w., 0.30.—Regulus, n. w., 0.40.—Rennet, liquid, g. w., 0.06; powder, l. w., 1.00.—Resorcine, n. w., 2.00.—Rhubarb, l. w., 2.00.—Ribbons, with not over 20% silk, 7.00; from 20 to 90% 14.00; over 90%, 34.00; all n. w.—Ridge pieces, g. w., 0.10.—Rifles, see Carbine.—Roofing materials: ruberoid, elastic and similar kinds, 0.10; shingles, 0.06; earthenware, 0.05; cardboard, 0.06; all g. w.—Roots, Turmeric, 0.15; medicinal, n. o. s., 0.25; both g. w.—Ropes, hemp, jute, 0.25; see also Cord.—Rogaries, with metal chains, 1.00; with silver chains, l. w., 12.00.—Rosary beads, l. w., 1.50.—Rosewood, per square meter, 1.00.—Rowlocks, g. w., 0.12.—Rubber, soft, crude, 0.04; in sheets, 0.20; with cloth for packing, 0.36; vulcanized, in sheets, 1.20; residues, 0.12; all g. w.; solution, l. w., 0.60; rubber manufactures, n. o. s., l. w., 2.50; rubber hose, 0.40; rubber supplies for druggists, n. o. s., soft or rubberized cloth, 2.50; hard rubber, 1.50; both l. w.—Ruberoid, g. w., 0.10.—Rubidium, n. w., 16.00.—Rubies, n. w., 5.00 per gram.—Rugs, see Carpets.—Rye, g. w., 0.05.—Saccharate, iron, l. w., 0.30.—Saccharin, n. w., 3.00.—Saddles, each, 20.00.—Safes, g. w., 0.30.—Saffron, l. w., 10.00.—Salicin, n. w., 6.00.—Salmon, canned, g. w., 0.25.—Salts, common, g. w., 1.50; Epsom, g. w., 0.03; Glauber's, g. w., 0.02.—Salvage from wrecks, free.—Samples, models, free.—Sandalwood, l. w., 0.50.—Sandpaper, g. w., 0.03.—Sapocarbols, g. w., 0.20.—Sapphires, n. w., 3.00 per gram.—Sardines, canned, g. w., 0.30.—Sashes for buildings, g. w., 0.20.—Sauces, g. w., 0.60.—Scammony, l. w., 4.50.—Scissors, l. w., 1.50.—Screws, g. w., 0.10.—Sculptures, free.—Sealing wax, l. w., 0.40.—Seals, iron, 1.25; nickel, 2.50; both l. w.—Selenite, sodium, n. w., 20.00.—Sera, free.—Shades, window, n. w., 2.00; window shade cloth, n. w., 0.75.—Shafts, for wagons, rough, g. w., 0.15.—Shapes, for hats, n. w., 2.40.—Shawls, cotton, 1.20 to 1.80; silk, under 20% silk, 12.00; from 20% to 90%, 24.00; 90% or more, 48.00; silk lace, 70.00; wool, cashmere or

merino, 3.60; other, 2.50; (all n. w.)—Sheep, reduced to 1.00 per head, until the end of 1921.—Sheet iron, plain, not painted, 0.01; plain, painted, 0.10; corrugated, not painted, tinned or galvanized, 1.20 per 100 kilos; painted, tinned or galvanized, 0.10 per kilo.—Sheets, bath, cotton, l. w., 1.20; linen, 1.20; Bed sheets pay same duty as pillow cases.—Shellfish, g. w., 0.20; preserved, or not, g. w., 0.80.—Sherbets, g. w., 1.50.—Shingles, g. w., 0.06.—Ships, sailing vessels, 1.20; for interior navigation, per ton measurement, 45.00.—Shirts, men, cotton, without parts of linen, 16.00 per dozen; with parts of linen, 24.00; all linen, 48.00 per dozen. Boy shirts are dutiable as men's with a reduction of 40%.—Shoe brushes, l. w., 1.50.—Shoes, materials and parts for, cement, g. w., 0.25; laces, l. w., 0.90; pegs, g. w., 0.10; soles, grass or straw, l. w., 0.90.—Shoe polish, common black, paste, 0.18; liquid, black, in bottles, 0.30; in barrels, 0.40; yellow, white, or other color, 0.50; all g. w.—Silk, in cocoons, or waste, thread or yarn for weaving, free; thread and yarn, n. o. s., n. w., 9.00; thread and yarn with wool, with or without metal, free; silk fabrics: muslin and embroidery canvas, with not over 20% silk, 1.80; over 20%, 8.00; English crepe, 20.00; felt for high hats, 12.00; bolting cloth, 6.00; powder bag cloth, 2.00; rubberoid cloth, 1.50; closely woven fabrics, with not over 20% silk, 6.00; from 20% to 90%, 12.00; over 90%, 25.00; transparent fabrics, containing not over 20% silk, 10.00; from 20 to 90 90%, 20.00; over 90%, 40.00; all n. w.; embroidered fabrics, transparent, 48.00; closely woven, 36.00; fabric containing no silk, but embroidered with pure or mixed silk, 3.00; all l. w. Silk manufactures not specially mentioned or specified, with not over 20% silk, 6.00; over 20%, 15.00.—Shutters, g. w., 0.35.—Sieves, bristle, 0.50; silk, 2.50; both n. w.—Silver, raw, or ore, free; leaf, 0.04 per gram; compounds, caseine, and nitrate, 10.00; albuminate and collargol, 40.00; n. o. s., 25.00; all n. w.—Sinks, g. w., 0.12.—Siphons, g. w., 0.25.—Syrups, g. w., 1.50.—Skates, l. w., 0.60.—Skylights, g. w., 0.06.—Slate, artificial, 0.06; slate blackboards, for schools, 0.02; in books for desks, 0.20; sheets for billiard tables, 0.05; all g. w.—Slate, bed, g. w., 0.20.—Snuff, l. w., 5.00.—Soap, not perfumed, n. o. s., g. w., 0.25; perfumed, n. o. s., l. w., 5.00; medicinal, not scented, 0.60; scented, 1.00; both l. w.; with mineral substances, for polishing, g. w., 0.25.—Sodium, n. w., 1.50.—Sodium compounds: hyposulphite, 0.01; silicate, impure sulphide, and sulphate, 0.02; bicarbonate, bisulphate, carbonate, impure caustic soda, and sulphite, 0.04; acetate, bichromate, borate, pure carbonate, cyanide, chlorate, phosphate, refined nitrate, pure sulphate, and pure sulphide, 0.10; pure caustic soda, bisulphite, calcined borate, acid hyposulphite, 0.20; all g. w.; cacodylate, cinna-my, coplavate, glycerophosphate, methylarsenate, molybdate, nitroprusside and iodide, 5.00; selenite, 20.00; n. o. s., 0.60; all n. w.—Soles, esparto or straw, l. w., 0.90; hemp or jute, g. w., 0.50.—Soldier, free.—Sole leather, n. w., 0.60.—Somatose, g. w., 1.80.—Soup paste, g. w., 0.40.—Soups, canned, g. w., 0.80.—Spermaceti, g. w., 0.20.—Spices: pepper and clove, whole, 0.25; ground, 0.40; aniseed, 0.45; cinnamon, whole, 0.10; ground, 0.15; cumin seed, 0.40; n. o. s., whole, 0.30; in paste or powder, 0.50; all g. w.; saffron, 10.00; truffles, 1.20; vanilla, 4.00; all l. w.—Spikes, hand, g. w., 0.05.—Spokes for wheels, g. w., 0.10.—Sponges, n. w., 3.00.—Springs, bands for, l. w., 0.60; furniture, g. w., 0.10; phonograph, l. w., 3.00; watch, l. w., 6.00; clock, l. w., 3.00.—Spurs, l. w., 0.50.—Stairways, wood, g. w., 0.50.—Stamps, postage, l. w., 8.00.—Staples, see Nails.—Starch, edible, 0.10; industrial, 0.20; both g. w.—Starch manufactures, l. w., 2.50.—Statues, cement, 0.15; plaster, 0.40; terracotta, 0.60; porcelain, 0.40; iron and steel, 0.30; all g. w.—Statues and figures, china, l. w., 0.50; glass, g. w., 0.30; pulp, g. w., 0.35; stone, g. w., 0.30.—Stays, corset, (bone or horn) l. w., 1.80; steel, g. w., 0.25.—Steers, reduced to 8.00 per head, until the end of 1921.—Stereoscopes, l. w., 2.00.—Stearine, in bulk, g. w., 0.10.—Stirrups, l. w., 0.50.—Stockings, elastic, of silk, 16.00; others, 6.00; both l. w.—Stones, imitation, l. w., 1.50; precious, 5.00 per gram; lithographic, n. o. s., 0.60 per kilo.—Stoppers, bottle, cork, g. w., 0.20; with parts of other material, l. w., 1.00; wood, g. w., 0.20.—Storax, l. w., 0.30.—Stove pipe, g. w., 0.15.—Straps, g. w., 0.15.—Straw manufactures, n. o. s., g. w., 1.00; for packing and covers or wrappers, g. w., 0.20; trimmings and ornaments with not over 10% of other mate-

rial, l. w., 1.20.—Structural iron, g. w., 0.06.—Strings, for musical instruments, of gut, 8.00; of metal, 1.20; both l. w.; G strings, l. w., 6.00.—Strontium compounds: carbonate, chlorate, and oxalate, 0.25; bromide, 0.75; iodide, hyposulphite and glycerophosphate, 5.00; n. o. s., 1.50, all n. w.; nitrate, and sulphate, g. w., 0.15.—Strychnine, n. w., 10.00; cacodylate, iodide, and iron citrate, n. w., 5.00.—Sugar, (per 100 kilos) from 85 to 98% saccharose, 3.75; from 98 to 99½% 6.00; over 99½% 9.00; impure, 3.00; all n. w.! powdered, with flavor, 0.45 per kilo, legal weight; candy sugar, gross weight, 0.25 per kilo.—Sulphocyanide, ammonium, n. w., 0.40.—Sulphur, in lumps, ground or sublimated, g. w., 0.06; precipitated, l. w., 0.20; iodide, n. w., 6.00.—Sumac, g. w., 0.02.—Supplies, assaying, free; electrical, g. w., 0.04; illuminating, g. w., 0.04; immigrants' free; military, free; printing, g. w., 0.10.—Suspenders, see Garters.—Suspensories, cotton or linen, 3.00; silk, 16.00; both legal weight.—Swan skin, net weight, 0.25.—Sweepers, gross weight, 0.50.—Sweetmeats, gross weight, 1.00.—Swine, 5.00 per head.—Switches, electric, g. w., 0.04; railway, g. w., 0.10.—Sword canes, per dozen, 18.00.—Syringes, tin, lead or brass, except hypodermic, 0.75; glass, 0.50; syringe glass tubes, 0.60; all l. w.

Table cloths, napkins and table sets: cotton, without embroidery, or lace, 1.50; with same, not of silk, 4.00; linen, without embroidery or lace, 3.20; with same, not of silk, 6.00; all l. w.; hemp or jute, n. w., 1.50; silk, dutiable according to fabric, plus 25% surtax; wool, n. w., 4.00.—Table covers, cotton, linen or wool, 4.00; of other fabrics, 2.00; hemp and jute, 1.50; both n. w.; silk, dutiable according to fabric, plus 25% surtax.—Tablets, medicinal, for hypodermic use, l. w., 10.00; others, g. w., 0.90.—Tableware, silver, n. w., 0.05.—Talc, for manufacture of soap, g. w., 0.15; tailors', g. w., 0.12; in thin sheets, colored, l. w., 1.80.—Tallow, g. w., 0.12.—Tamarinds, g. w., 0.10.—Tambourines, n. w., 4.00.—Tanning summac or extracts, n. o. s., g. w., 0.02; degreas, g. w., 0.15.—Tape, for bundles, l. w., 0.25; for telegraphs, each 15.00.—Tapers, for lamps, g. w., 0.60 see also Candles.—Tar, g. w., 0.01; vegetable, refined, l. w., 0.05.—Tape, g. w., 0.03; supplies, n. o. s., 0.05.—Taximeters, l. w., 1.20.—Tea, in bulk, 0.90; in paper packages, 1.00; in tin containers, 1.10; all n. w.—Teeth, artificial, l. w., 25.00.—Telegraph supplies, crosspieces, g. w., 0.10; ink, g. w., 0.10.—Telegraph instruments, g. w., 0.05.—Telescopes, each, 15.00.—Tents, g. w., 0.60.—Terpine-dihydrate, n. w., 0.60.—Terpinol, n. w., 0.50.—Terra cotta, g. w., 0.60.—Thimbles and cringles, wood, 0.05; iron and steel, 0.05; copper, 0.10; all g. w.—Thiol, powder, 15.00; liquid, 4.00; both n. w.—Thread (see different materials).—Tickets, not printed, g. w., 0.20; printed, l. w., 1.50.—Ticket punches, l. w., 1.20.—Tickling, for mattresses, n. w., 0.50.—Ties, railroad, g. w., 0.02.—Tiles: without enamel or mosaic, 0.10; with same, 0.25; roofing, 0.05; glazed paper, 0.35; all g. w.—Tin compounds: chloride, 0.40; sulphide, 3.00; n. o. s., 1.00; all n. w.—Tin and manufactures (same duties as lead and manufactures).—Tin plate, common, 0.01; stamped, painted or varnished, 0.20; both g. w.—Tinplate manufactures, n. o. s., nickel-plated, 1.00; n. o. s., plain, 0.65; both g. w.; silver plated or gilded, n. o. s., l. w., 2.50.—Tinsel: gold or platinum, 0.30 per gram; silver, 0.03 per gram; both n. w.; brass, 2.50 per kilo; nickel, 3.00; silvered or gilded, 6.00; both l. w.—Tires, steel, g. w., 0.02.—Tobacco, l. w., 10.00; cut or shredded, n. w., 5.00.—Toe pieces for shoes, n. w., 4.00.—Toilet waters, l. w., 3.00.—Toluol, n. w., 0.15.—Tongues, g. w., 0.50.—Tools, hand and mechanical, for mechanics, free.—Torpedoes, free.—Tortoise-shell, and manufactures, pay same duty as ivory.—Tow, g. w., 0.02.—Towels, hand or dish, cotton, 0.90; linen, or pile fabrics, 0.90; other, 2.40; dish, 0.90; all l. w.—Toys: rubber or celluloid, 0.12; mechanical or electrical, and Christmas tree ornaments, 1.20; not otherwise specified, 0.70; all legal weight.—Traction engines, g. w., 0.03.—Trapezes, g. w., 0.45.—Traumatine, l. w., 1.25.—Trays, iron, l. w., 0.50.—Trimnings, silver, l. w., 0.03 per gram.—Trimethylene, n. w., 2.00.—Trimnings, cotton, l. w., 1.80; hemp and jute, l. w., 1.20; linen, l. w., 1.80; straw and wood shavings, l. w., 1.20; wool, l. w., 3.50.—Trinitrine, l. w., 1.25.—Tripods for telescopes, l. w., 5.00.—Troughs, n. w., 0.20.—Trucks, railway, for railroads, 0.10; motor, 0.20; both g. w.—Truffles, dry or fresh, l. w., 1.20.—Trusses, l. w., 3.60.—Tubes, boiler, or glass,

g. w., 0.05.—Tubing rubber, g. w., 0.40.—Tuning forks, l. w., 0.80.—Turmeric, g. w., 0.15.—Turntables, railway, g. w., 0.10.—Turpentine, not refined, g. w., 0.06; refined, l. w., 0.30.—Turpeth, l. w., 4.50.—Type, 0.90.—Type metal, g. w., 0.15.—Typewriters, g. w., 0.50.—Twine, (See Cord).

Ultramarine, g. w., 0.10.—Umbrella frames: wood, l. w., 0.20; iron and steel, g. w., 0.20.—Unions, metal, g. w., 0.10; for fastening cases, g. w., 0.15.—Uralite cement, g. w., 0.06.—Uranium, compounds, n. w., 6.00.—Urea and compounds, n. w., 4.00.—Umbrellas and parasols: cotton, 5.40 per dozen; wool, 9.00 per dozen; silk, or with silk trimmings, with handles of tortoise-shell, ivory, pearl, or precious metals, 60.00 per dozen; with plain handle, 24.00 per dozen.—Urethane and compounds, n. w., 10.00.—Utensils, household: n. o. s., of wrought iron, 0.15; of cast iron, 0.07; both g. w.

Vaccine, free.—Vacuum cleaners, g. w., 0.50. — Valises (see Trunks); wool, n. w., 2.00.—Varnishes; common, for ships, g. w., 0.10; composition for inside of barrels, g. w., 0.30; amber, for photography, l. w., 1.20; n. o. s., g. w., 0.50.—Vaseline, g. w., 0.30.—Vasogen, pure, 1.20; compound, 2.50; both legal weight.—Valldol, n. w., 18.00.—Valves, iron, n. w., 0.10; copper, g. w., 0.50.—Vanilla, l. w., 4.00.—Vanity bags, l. w., 13.00.—Vases, g. w., 0.30.—Vegetables, mushrooms, 0.20; dry, not otherwise specified, 0.10; fresh, n. o. s., 0.05; preserved, 1.00; all g. w.—Vegetaline, g. w., 0.20.—Venners, g. w., 0.10.—Vinegar, g. w., 0.15.—Violet wool, per square meter, 1.00.

Wagons, g. w., 0.25.—Wallets, l. w., 6.00.—Wall paper, gilded, or silvered, n. w., 1.50; of other kinds, g. w., 0.25.—Water, free; medicinal, g. w., 0.25; mineral, g. w., 0.25; oxygenated water, g. w., 0.10, toilet, l. w., 3.00; peroxide, n. o. s., 6.00.—Wax, shoemakers', l. w., 0.30.—Wheat, free.—Whips, l. w., 4.00.—Whiskey, in bottles, per liter, 2.50; in other containers, 2.00.—White lead, g. w., 0.25.—Windows, g. w., 0.50.—Wines, in bottles, 0.80; sparkling wines, 2.50.—Wafers, for medicines, empty, 1.80; filled, 3.50; all l. w.—Watches: repeaters and those with calendars or diamonds, 20.00 each; with gold case, with pearls or other gems than diamonds, 6.00 each; with silver case, 2.00 each; with case of common metal, 1.00 each.—Wax, g. w., 0.60; vegetable, g. w., 0.25; mineral, g. w., 0.03.—Whalebone, crude, 0.50; n. o. s., 4.50; manufactures, 2.60; all l. w.—Wheels for vehicles, with solid rubber tires, 0.65; with pneumatic tires, 1.65; n. o. s., 0.20; wheel parts, 0.10; all g. w.—White metal, and manufactures, pay same duty as nickel and manufactures.—Wicks, yarn, cotton, g. w., 0.10; for portable stoves, l. w., 0.75; knit tubular for incandescent light, l. w., 3.00.—Wire gauges, l. w., 0.50.—Wire: iron, 0.50 per 100 kilos; nickel or white metal, 0.01; of common metal, insulated or covered, 0.10. Wire netting, copper or brass, less than 5 meshes per centimeter, 0.20; 5 meshes or more, 0.30; all g. w. Iron wire fences, g. w., 0.05; iron wire cable, g. w., 0.04. Wire and wire cloth manufactures pay same duties as manufactures of corresponding material.—Wood manufactures: n. o. s.: marked for pyrography, weighing up to one kilo, 0.30; weighing over one kilo, 0.20; varnished, veneered, waxed, lacquered, painted or covered with paper, weighing up to one kilo, 0.80; over one kilo, 0.50; wood houses, 0.30; all n. w.—Wood, cabinet, per square meter, 1.60; dye, g. w., 0.02; fire, free.—Wool: sheep raw, unwashed, 0.12; washed, 0.25; vicuna, llama or alpaca, 0.50; all g. w. Fabrics: balze, 0.90; museline and canvas, 1.20, both n. w.; fabrics and strips or bands embroidered without silk, l. w., 5.00; fabrics, n. o. s., scalloped or embroidered in chain, without silk, n. w., 3.00; knitted fabric, n. w., 2.40; net fabrics, n. w., 3.00; fabrics, n. o. s., with over 10% pure wool, weighing up to 250 grams per square meter, n. w., 2.10; exceeding 250 grams: with not over 3% silk, n. w., 2.00; without silk, n. w., 1.50. Wool manufactures, n. o. s.: of point lace, crocheted, bobbinet, not or imitations, with over 10% wool, l. w., 5.00; manufactures, n. o. s., embroidered on woollen cloth without silk, 5.00.

Xylol, l. w., 0.12.

Yeasts, g. w., 0.05.—Yerba mate, n. w., 0.05.—Yokes for harness, g. w., 0.15.—Yolks, egg, g. w., 0.15.
Zinc, white, g. w., 0.01.—Zinc: ore, bars, sheets or plates, free; granulated, filings or shavings, 0.36; sheets, varnished or coated,

0.40, both g. w. Zinc manufactures, n. o. s., silvered or gilded, 2.50; nickel plated, 1.00; others, 0.70; all l. w. Zinc compounds: sulphate, g. w., 0.06; acetate, pure carbonate, chloride, pure oxide, sulpho-carbonate, 0.40; bromide, cyanide, phosphate, and tannate, 1.00; permanganate, 6.00; n. o. s., 2.00; all n. w.—Zomol, g. w., 1.80.

EXPORT DUTIES.

Frozen meats, 3 cents per kilo; preserved meats, extract of meat, and other meat products, 3 cents per kilo; sheep hides, without wool, 20 cents per kilo; cattle hides, 5 cents per kilo; horse hair, 25 cents per kilo; raw wool, 20 cents per kilo; washed wool, 50 cents per kilo. The President of the Republic has authority to increase or reduce up to 25% the duties above stated, in case the price of the articles affected by the duty goes up or down in the foreign markets. The changes introduced by the President will be in force for three months. The duties referred to above, are in Chilean money.

The payment of export duties is made in the following manner: 45 per cent. plus surcharges, if any, in national currency; 35 per cent. in drafts on London or New York at the option of the exporters; and 20 per cent. in national gold coin or sterling pounds.

SHIPPING.

Ten steamship lines ply regularly, in normal times, between the ports of Chile and those other countries, going along the coast from Valparaiso to Panama, and from this point to many of the ports of Europe. Frequent communication is maintained through the Strait of Magellan with United States, Germany, England, Scotland, Belgium, Austria, France, Italy, and Spain. A Japanese line crosses the Pacific. The Chile steamers of the Compañía América de Vapores, make frequent trips in connection with those of the English company, along the coast, calling at ports as far as Panama. Moreover, there are numerous local shipping companies, for Chile has developed this trade quite profitably, and the men of Chile are by birth and training inborn sailors. Passenger steamers can be taken in several ports of Europe for direct travel to Valparaiso, but since the opening of the railway across the Andes, the quickest way to reach Chile from the east is by steamer to Buenos Aires and thence by rail to the destination. Express steamers are now scheduled between Panama and Valparaiso.

The merchant fleet of Chile in 1916 consisted of 101 steamers of a total tonnage of 51,221 net, and 28 sailing vessels of 24,764 tons net.

A contract has been signed in Rome between the Chilean minister in Italy and the Compagnia Transatlantica Italiana, of Genoa, which provides for the establishment of a line of freight and passenger steamers between that port and the coast of Chile.

The contract provides that the company would assign at first to this service three cargo steamers of modern design of about 12,000 tons displacement, which would run between Genoa and Valparaiso, with ports of call in the Mediterranean and on the Atlantic and Pacific coasts. The service is to be via the Panama Canal, or through the Straits of Magellan if special reasons require same. Sailings at first are to be at 40-day intervals.

The company now has under construction three freight and

passenger boats of about 14,000 tons displacement which will be added to the service between Italy and Chile and thereafter sailing will be about 30 days apart. The company guarantees to have at least 12 round trips per year. The Chilean Government is to pay at the rate of £8,400 for 12 trips of the cargo boats and £10,800 for the cargo and passenger vessels. The company agrees to carry without charge mail and parcel-post packages for the Chilean Government and will provide free passage for Chilean functionaries.

Due to the opening of the Panama Canal, and to the World War, calls at the port of Punta Arenas, Chile, by vessels in transit through the Straits of Magellan decreased in number from 476 in 1913 to 99 in 1918.

In 1912 the calls by vessels at Punta Arenas totaled 417; in 1915, 253; in 1916, 228, and in 1917, 136. Of the 99 calls in 1918, 39 were made by ships owned by Punta Arenas interests which ply regularly between Punta Arenas and Valparaiso, Chile, and between Punta Arenas and Buenos Aires, Argentina, and in 1917 these vessels made 43 of the total of 136 calls.

The South American Steamship Co., which was established in July, 1872, with a capital of 1,500,000 pesos, has increased its capital to 7,500,000 pesos, and its fleet from 5 vessels with a tonnage of 2,400 tons and a value of 700,000 pesos, to 20 vessels, 15 of which have more than 1,400 tons each. The profits of this company, which during the first half of its first fiscal year amounted to 85,260 pesos, gold, were in the first half of 1918, 5,778,868 gold pesos. The company first engaged in the coastwise trade, then extended its operations to Callao, Peru, and later to Guayaquil and Panama, reducing the time between the latter place and Valparaiso to 14 days, including stops at Paíta, Salaverry, Callao, Mollendo, Arica, Iquique, and Coquimbo.

The Royal Mail Steam Packet Company inaugurated a direct steamship service, without transshipment, from Valparaiso to New York.

The firm "Mutua Comercial" of Valparaiso has signed a contract with the Ecuadorean Government to operate a line of monthly freight and passenger steamers from Guayaquil to Chilean ports. The service has already begun.

The President has approved the articles of incorporation of the National Steamship Co., just started in Chile with a capital of £165,000 sterling.

The Merchant Marine of Chile has been increased by the construction of schooners supplied with auxiliary engines. One, the San Antonio, was built in the shipyards of Oettinger Bros., Valdivia, and has a capacity of 600 tons, and will be used in coastwise trade. Another, "El Porvenir," was built in the shipyards of Hoffman Bros., in Valdivia; this vessel has a capacity of 400 tons and will be used in trade with Peru.

Two sailing vessels were built by Mario Ibar in his shipbuilding yards at Constitución. The two vessels have been christened "Toqui" and "Cacique."

Chile has a long coast line which extends from about 18 degrees to 56 degrees south latitude. The continental section of

Chile extends from approximately the 18th to the 42d parallel, while the insular or archipelago section extends from about the 42d to the 56th parallel. In this long stretch of coast there are numerous ports. Practically all of the Chilean ports are, more or less open and are exposed either to the southwest or northern winds which come several times a year and generally with disastrous effect.

In the extreme north is the port of Arica, which lies in the disputed border Province of the same name, and is the terminus of the Arica-La Paz railroad. At the extreme south is Punta Arenas on the Straits of Magellan. Between these extremes comes a large number of ports. The most important are:

Pisagua, Junín, Caleta Buena, Iquique, Tocopilla, Gatico, Mejillones, Antofagasta, Caleta Coloso, and Taltal, in the northern section of Chile and in the so-called nitrate zone.

To the south of this section are the ports of Chañaral, Caldera, Huasco, Cruz Grande, Coquimbo, and Guayacán, which are given over very largely to the exportation of minerals, and agricultural products.

The next group to the south includes Valparaíso, San Antonio, Constitución, Talcahuano, Penco, and Tomé, which serve the agricultural districts of the central zone of Chile.

Coronel, Lota, and Lebu, are used chiefly for the handling of coal which is produced in large quantities in the district.

The ports which serve the agricultural and timber districts of the southern section of the continental portion of Chile, are Corral, Valdivia, and Puerto Montt.

With a few exceptions, all of the above-mentioned ports have some harbor works, but these are not extensive at any ports except Valparaíso and San Antonio.

A terrific storm which swept Valparaíso harbor on July 11, 12 and 13, 1919, caused losses of about \$6,000,000 United States gold. About 50 men were drowned, the majority of whom could have been saved if the port had been equipped with adequate life-saving apparatus.

About 120 craft were sunk, including 77 open lighters, 14,000 ton interned German shipping, and 7 large hulks which served as supply depots.

Some of the older port works, including the rock wall beyond the Bella Vista station, were badly damaged, but the newer works of the Pearson Co. withstood the severe strain very well, only a few of the 60-ton blocks being slightly displaced. This has led to considerable discussion of the whole problem of port works on the Chilean coast. New proposals are now before Congress which are being actively pushed by the Government calling for the appropriation of £4,330,000 sterling, to be spent on the improvement of six ports on the southern half of the coast line, namely, Valparaíso, Constitución, Talcahuano, Lebu, Puerto Saavedra, and Valdivia. Valparaíso is to have £1,500,000 of this sum, which with the £3,500,000 of the Pearson contract, would give the port a total of £5,000,000.

Arica, the most northern port, is a regular port of call for the steamers of the Compañía Sud-Americana de Vapores (the Chilean Line) and the Pacific Steam Navigation Co. The former

line operates a weekly service in both directions between Lota, Valparaiso, and Panama, and a bi-weekly service in both directions between Lota, Valparaiso, and Eten (Perú); while the latter line maintains a service of approximately one steamer every ten days between south Chile ports and Panama.

Other lines making frequent calls at Arica, are the Merchants Line of W. R. Grace & Co., which operates between New York and West Coast ports; the Gulf or Branch Line of the Nautilus Steam Shipping Co., with a monthly service between Japan and the west coast via San Francisco and Salina Cruz (Mexico); and the Johnson Line, with a bimonthly service between Stockholm, Malmo, Gothenberg, Christiania, and Copenhagen and west coast ports (via the Panama Canal), San Francisco, and Seattle.

In 1915 the Comisión de Puertos made a detailed study of the needs of the port of Arica and drew up a plan of improvements. The project calls for the creation of a well-sheltered area or inner harbor to the north of Alacran Island by the construction of a mole connecting the island with the mainland and of a long breakwater extending in a northerly direction from the western end of the island.

On May 20, 1919 the Treasury Department issued rules and regulations explaining the present coastwise law. Under these rules and regulations the transportation of passengers and freight from Punta Arenas and other ports of the Republic, or vice versa, shall not be considered coastwise trade. On and after February 9, 1927, the carrying of freight between ports of the Republic shall be exclusively in national bottoms, with the sole exception of South American vessels which, through reciprocity treaties, may have obtained from the President of the Republic the right to engage in the coastwise trade of Chile.

Half the crew of national vessels engaged in the coastwise trade, beginning with the year 1922, shall be composed of Chilean seamen, and the captain and pilot shall also be Chileans.

RAILROADS.

Although smaller than either Peru or Bolivia, Chile has a greater railway mileage. It has a railway extending longitudinally from near Iquique to Puerto Montt, and three international lines, two of which extend into Bolivia. The third, the trans-Andean, connects Valparaiso on the Pacific with Buenos Aires on the Atlantic, and is used to import live stock from Argentina, but has never been used to transport through freight across the continent.

The railroads in operation had a total length of about 5,200 miles, of which 3,236 belong to the government.

There are 14 miles per 10,000 inhabitants and 17.6 miles per 1,00 square miles of territory.

A presidential law of April 29, 1919, authorized the expenditure of 25,000,000 pesos, gold, for the electrifying of the first zone of national railways and approved the project for construction and repairs. The Valparaiso-Santiago Railroad is comprised in the zone.

A contract has been made with the Arica-La Paz Railway Co., to run freight as well as passenger trains over the lines of the Antofagasta-Bolivia Railway line as far as the city of La Paz.

The board of directors of the Federal railways (Ferrocarriles del Estado), held a railroad conference in Santiago in September, 1919, with a view to improving the service.

The general board of directors of the Federal railways has been authorized to set aside 2,000,000 pesos for various railway improvements.

The Chilean Senate passed a law on February 17, 1919, authorizing a loan of 89,000,000 pesos for the purpose of supplying the necessary expenses of the State Railroad. Further, an increase of 20 per cent. on the passenger and freight rates was agreed upon.

The Argentine Railway has submitted a plan to the executive power under which authority is requested for a joint administration of the Chilean Transandean Railway.

On July 5, 1919, the Chilean Government by public decree authorized the Antofagasta & Bolivia Railway Co. to advance its freight rate and its first-class passenger rate 15 per cent. above the present rates, while an increase of 5 per cent. was authorized for second-class passenger fares. Both decrees became effective January 1, 1920. Increased cost of operation occasioned the advance in rates. The nitrate producers made protest against the decree as adversely affecting their industry at a critical time when it should be protected instead of hampered by an increased production cost. An agreement has been signed by the Chilean Government and the Antofagasta & Bolivia Railway Co. whereby the latter assumes the management of the state-owned Ferrocarril Longitudinal, Northern Section, the change becoming immediately effective. As a result of this agreement, all principal railway systems of the northern provinces pass under one management.

A recent presidential decree raised the extra-subsidy granted the Arica-La Paz railroad to 214,387 pesos.

A diplomatic mission from Chile, which visited England during November, 1919, made a diligent inquiry into commercial conditions in that country, and the possibility of supplying some of Chile's urgent demands for engineering requirements, and especially for railway rolling stock.

Plans and specifications have been completed for a new line between Valparaiso and Santiago, via Casablanca. A line from Pua to Traiguén has been commenced, and construction is proceeding on the line from Iquique to Pintados. The Northern Central Railway of Chile is also being extended.

The Chilean Inspector of Railways, señor Mardones, made an inspection trip of the transandine railway with technical experts. His report to the government asserts that in his opinion 500,000 pounds sterling are needed for improving the line on the Chilean side.

The following list shows the most important privately operated railways in Chile, with their capitalization and debentures:

All amounts are in sterling pounds, unless otherwise marked.

Antofagasta and Bolivia Railway, Preferred ordinary stock, 5 per cent., 2,000,000; deferred ordinary stock, 2,000,000; 5 per cent. cumulative preference stock, 2,000,000; 4 per cent. perpetual debenture stock, 1,000,000; 4½ per cent. debenture stock, redeemable, 1,000,000; 5 per cent. debenture stock, redeemable, 1,500,000; 5 per cent. Bolivia debenture stock, redeemable, 600,000.—Aguas Blancas Railway: Stock, \$10,000,000; 4½ per cent. debenture stock, 836,629.—Anglo-Chilean Nitrate & Railways: Ordinary shares (30 per cent., 1917), 550,000; Preference shares (30 per cent., 1917), 350,000; 4½ per cent. consolidated mortgage bonds, 347,300.—Arica & Tacna Railway: Ordinary shares, 450,000.—Arauco Co.: Ordinary shares (10 per cent., 1917), 477,800; 5 per cent. irredeemable first mortgage debentures, 298,164; 6 per cent. redeemable second debenture stock, 177,223; 5 per cent. income debentures, 75,000.—Carrizal & Cerro Blanco Railway: Capital stock, \$1,500,000.—Chilean Transandine Railway: Ordinary shares, 100,000; Preference shares, 6 per cent. cumulative 1,400,000; 5 per cent. debentures, "Series A", 278,100; 5 per cent. debentures, "Series B", 538,650; 5 per cent. debentures, "Series C", 668,250.—Nitrate Railways: Ordinary shares, 1,485,340; Preferred converted, 170,660; Deferred converted, 170,660.—Taltal Railway: Ordinary shares (9 per cent., 1917), 900,000; 4½ per cent. first charge debentures, 185,100. Chilean Eastern Central Railway Co., Ltd. Registered in London in 1910. Owns a concession for 90 miles. Capital, authorized, \$1,200,000; issued, \$1,000,035.

Chilean Northern Railway Co., Ltd. Registered in London in 1910. Owns a concession for 450 miles. Capital, \$2,500,000.

The Chilean mission, recently in the United States, announced that among their purchases to be made from the proceeds of a \$32,000,000 loan are electric lines, feeders, and sub-stations to the value of \$2,300,000, and electric locomotives valued at \$2,100,000. These materials will be used in the electrification of the railway between Valparaiso and Santiago. Among other railroad expenditures is mentioned \$1,500,000 for electric signal systems.

The balance sheet of the Nitrate Railroad operated by the Anglo-Chilean Nitrate Co. as concessionaire, in 1918 showed a profit of £31,864, which added to the profit of the previous year reached a total of £296,819 available for the present year. During the year the railroad transported 245,641 tons of freight, and 27,611 passengers, as against 92,523 tons of freight and 28,823 passengers of the previous year. The output of nitrate was 2,275,700 quintales.

The report of the La Arauco Co. (Ltd.) made on April 30, 1919, shows a profit of £11,063. In October of the past year this company declared a dividend of 5 per cent. and has now declared another for the same amount, both of these being tax-free. The company turned £50,000 into the reserve fund, leaving a balance of £25,850 for the year 1919. The railroad of this company turned in a net profit of £54,696, and the mines a profit of £117,657. During the year 1918, 170,756 tons of coal were sold.

POSTS AND TELEGRAPHS.

There are about 19,000 miles of telegraph lines in the Republic with 33,000 miles of wire, and 950 telegraph offices. The length of telephone line distributed throughout the country is about 45,000 miles, and 56,000 miles of wire.

In proportion to the population, there are about 49.9 miles of telegraph per 10,000 inhabitants, and about 90.5 miles per 1,000 square miles of territory.

The latest official figures available give 1,508 post offices, 153,037 miles of postal routes; 97,398,571 miles of mail service performed annually; 909,621 orders issued in a year, of a value, in American money, of \$6,538,971. In proportion to the population, there are 2.5 post offices per 10,000 inhabitants.

The Chilean and Argentine Governments have signed an agreement providing for the union of the telegraph lines in the southern part of the continent, thereby establishing a new channel of communication which will greatly facilitate commercial transactions between the two countries.

Parcel-post service is in operation between the United States and Chile, at the postage rate of 12 cents a pound, and with a weight limit of 11 pounds, under the restrictions imposed in the Annual Postal Guide for 1918.

Parcel-post mails can be prepared and dispatched from New York, New Orleans, and San Francisco, whichever is the most expeditious route.

The laying of the Chilean cable from Arice to Panama, a distance of about 2,000 miles, if it is followed by an extension to Florida, which is now expected, will afford direct communication between the two countries.

There are several smaller independent telephone companies, but the most of the more important places are controlled by the Chile Telephone Co., an English concern with headquarters in Santiago. It is preparing to replace much of the older equipment with more modern material.

FINANCE.

Up to 1917 Chile's expenditures were generally larger than the revenue as is shown in the following table:

Year	Revenue	Expenditure
1912	\$78,400,000	\$82,800,000
1913	78,668,510	80,803,800
1914	52,888,445	65,800,190
1915	46,703,665	49,937,190
1916	48,318,750	66,055,295
1917	48,605,000	47,860,380

The receipts and expenditures of the National Government in 1918 were as follows: Gold receipts, 94,918,327 gold pesos, gold disbursements, 72,580,606 pesos, or an excess of gold receipts over gold expenditures of 22,337,721. The receipts in currency amounted to 239,981,714 pesos and the expenditures to 224,128,059 pesos, leaving a currency credit balance of 15,853,655 pesos. Adding to this amount, the 9,734,561 pesos currency, which was on hand at the close of 1917, it makes an available currency total of 25,588,216 pesos. Of the gold excess, 11,436,839 pesos were used in canceling the deficit of 1917, 5,733,333 to reimburse the Port Works Loan Fund, and 5,167,549 pesos remained available for use in liquidating the gold expenses of the

present year. Of the 25,588,216 pesos currency, 10,000,000 pesos were applied to the cancellation of one-third of the treasury notes issued for the purpose of reducing the fiscal deficit, and the balance of 15,588,216 pesos remained available for the payment of currency expenditures of 1919.

On the 1st of January, 1919, the following national funds deposited by the Government were: In London, £2,909,097; letters of credit payable, £715,010; in the United States, \$1,437,602; in the mint, 2,904,846 pesos gold and in fiscal treasuries of the Republic, 52,674,025 pesos in paper and 519,855 gold.

After making payments out of the £4,000,000 deposited in foreign banks, required by the foreign debt, as well as for administrative, diplomatic, and consular services, that fund had a balance on hand of £2,500,000 and \$1,437,000, the latter sum deposited in United States banks. The Government's account current with the Bank of Chile has continued to show a considerable credit balance, which on May 20, 1919 amounted to 41,000,000 pesos.

During the first quarter of 1919 Government revenues aggregated 52,812,965 pesos currency, and 8,318,048 pesos gold.

The expense budget for 1919 was fixed at 234,935,607 pesos paper and 66,858,245 pesos gold, distributed in the following manner: Department of the interior, 50,802,519 pesos paper and 179,573 pesos gold; department of foreign relations, 410,633 pesos paper and 1,342,828 pesos gold; religious service section, 1,490,410 pesos paper and colonization section, 453,574 pesos paper; department of justice, 11,166,308 pesos paper; department of public instruction, 44,425,530 pesos and 140,000 pesos gold; department of the treasury, 34,868,174 pesos paper and 48,649,662 pesos gold; department of war, 42,419,693 pesos paper and 137,063 pesos gold; department of the navy, 24,826,538 pesos paper and 16,204,013 pesos gold; department of industry and public works, 18,056,691 pesos paper and 233,272 pesos gold; and department of the railways, 6,024,533 pesos paper and 1,833 pesos gold.

The income for 1919 was estimated at 90,810,000 gold pesos, and 136,034,000 pesos, currency.

On January 1, 1919 funds to be used in the conversion of the paper money were apportioned as follows: London, 47,054,130 gold pesos; mint, 64,000,000, gold pesos; in shipment to Chile, 218,107 gold pesos.

It will cost Chile 234,935,607.60 pesos (\$66,858,245.84 gold) to conduct its business for 1920. The budget, as submitted by the President is:

Minister of Interior, 50,902,519.78 pesos; Minister of Foreign Relations, 2,745,618.06 pesos; Minister of Justice, 11,166,308.19 pesos; Minister of Public Instruction, 44,425,530.09 pesos; Minister of Treasury, 34,868,174.45 pesos; Minister of War, 42,419,693.81 pesos; Minister of Navy, 24,826,538.23 pesos; Minister of Industry and Public Works, 18,056,699.00 pesos; Railroads, 6,024,533.00 pesos. Total 234,935,607.60 paper pesos (\$66,858,245.84 gold.)

Subtracting from these sums 6,494,000 in bills and 21,567,-

000 in gold covered by special appropriations, a balance remains of 226,117,681 pesos, paper, and 44,534,790 pesos gold. The revenues for the year are estimated at 166,138,810 pesos, paper, and 84,700,000 pesos, gold. The budget shows a deficit of 59,978,871 pesos paper, and a surplus of 40,165,209 pesos gold.

A law has been passed authorizing the president of the Republic to collect an additional tax in 1919 of 2 per 1,000 as decreed in article 29 of the law of April 5, 1916, establishing a tax on district property.

For the first eight months of 1919 the customs revenue amounted to 76,954,260 pesos, as against 145,253,326 pesos for like period of 1918, showing a diminution of 68,299,066 pesos for 1919. The export revenue for the same period was 11,579,551 pesos.

The total number of Government land holdings registered by the section of national property for the first six months of 1919 was 9,661 worth 332,354,914 pesos. In 1909 there were 3,135 government-owned properties, worth 203,755,441 pesos.

NATIONAL DEBT.

On January 1, 1919, the National public debt of Chile was as follows: Internal debt, gold, 157,589,000 pesos; internal debt, currency, 76,600,000 pesos; guarantees and interest for construction of railways, gold, 100,000,000 pesos. Foreign debt, gold, 400,000,000 pesos. The debt, including interest and amortization, requires an annual expenditure by the State of nearly 40,000,000 pesos, gold, consisting of the following items: Foreign debt, 29,576,000 pesos; fiscal guarantees, 8,197,000; internal gold debt, 390,000 and internal currency debt 1,812,000 pesos. These payments amount to about 30 per cent. of the usual revenues of the State.

On several occasions Chilean municipalities have been borrowers abroad. The loans are, as a rule, guaranteed by the Republic. Such obligations have enjoyed a ready market in Europe. The debts of the principal municipalities, according to the latest data obtainable, are as follows:

Tacna, 33,018 gold pesos; Arica, 57,106 paper pesos; Antofagasta, 2,666,667 gold pesos and 297,718 paper; Tocopilla, 60,000 paper pesos; Taltal, 22,284 paper; Santa Luisa, 23,479 paper; Chanaral, 20,000 paper; Caldera, 12,000 paper; Quillota, 79,180 paper; Valparaiso, 5,496,871 paper; Vina del Mar, 4,794,012 paper; Santiago, 12,621,500 paper; Providencia, 295,542 paper; Rancagua, 22,000 paper; Talca, 684,693 paper; Concepcion, 132,134 paper; Penco, 34,881 paper; Temuco, 370,763 paper; Valdivia, 11,718 paper; Puerto Montt, 11,520 paper; Ancud (Chiloe Island), 4,111 paper; Punta Arenas, 1,220,320 paper.

The ministry of the treasury has issued a decree authorizing the directorate general of accounting to issue fiscal bonds to the amount of 5,000,000 pesos, currency, under the guarantee of the State, with 7 per cent. interest and 1 per cent. amortization. The funds from these bonds will be used, 3,000,000 for school buildings, and 2,000,000 for irrigation systems.

BANKING.

A law was passed in Chile in 1912 establishing a Bank of Issue (Caja de Emisión). There are a number of joint-stock banks of issue with agencies in Chile, their joint capital amounting to 180,792,505 gold pesos and their reserve funds to 70,700,047 gold pesos, and a paid-up capital of 40,000,000 pesos. A guarantee of their note issue is required of each bank, by depositing gold, Government notes, or securities in the Treasury. There are also land banks. These banks issue scrip payable to bearer and bearing interest and also lend money secured as a first charge on land property and repayable at fixed periods. The National Savings Bank of Chile (Caja Nacional de Ahorros) has 120 establishments in operation throughout the country.

The Bank of Chile, which was the result of a fusion of the Valparaíso agricultural and national banks on January 2, 1894, and which began business with a subscribed capital of 40,000,000 pesos and a paid-up capital of 20,000,000, recently completed the twenty-fifth year of its existence. In 1906 the subscribed capital of this bank was increased to 60,000,000 pesos, in 1910 to 80,000,000, and in 1917 to 120,000,000, and the paid-up capital to 40,000,000 and 60,000,000 respectively. In January, 1919, it had a reserve of 36,000,000 pesos paper and 5,000,000 gold, and in addition to its offices in Valparaíso and Santiago it has its own office in London and 46 branches in different parts of Chile.

The profits of the Bank of Chile in 1918 were: 5,299,987 pesos, which added to the stockholders' fund of 3,091,267 pesos, made a total of 8,391,254, distributed as follows: Dividend of 8 per cent. 4,800,000; employees' saving fund, 480,000; stockholders' fund, 3,111,254. The gold-reserve fund is 5,000,000 pesos.

A Chattel Mortgage Bank has been organized in the city of Valparaíso. Loan banks which were formerly inspected by the Department of Justice have now been placed under the supervision of the Department of Finance.

The Banco Nacional Hipotecario, with an authorized capital of 10,000,000 pesos, and a paid-up capital of 3,000,000, has been established in Santiago.

On January 2, 1918, the Yugoslav Bank of Chile was founded at Punta Arenas with an initial capital of 1,000,000 pesos currency. This amount was increased in June, 1918, to 2,000,000 pesos. At the close of its first year's business this bank paid to its stockholders a dividend of 10 per cent.

The Banco Italiano opened for business on August 16, 1919, in Santiago. The bank will also open a branch in Valparaíso.

The balance in the Santiago Savings Bank on January 1, 1919, was 53,764,066 pesos paper, distributed among 262,607 accounts. The balance the former year was 38,810,034 pesos in 235,997 accounts. Consequently, the increase in 1919 was 14,954,042 pesos and 26,610 accounts. The bank statement showed that the mortgage bonds deposited in the bank totaled 9,265,657 pesos. Adding this amount to the increase in deposits, the total savings accounts amount to 63,029,734 pesos.

The year 1918 was very favorable to the development of the business of the savings banks of the Province of Nuble, as is shown by the following figures, all values being expressed in Chilean paper pesos. Total business, 100,953,890. Deposits in 1918, 41,084,544; repayments, 40,142,170; increase in 1918, 942,374; balance in 1917, 4,431,397; depositors' mortgage drafts 729,911. Deposits made during year, 6,103,683.

The amount of mortgages contracted on territorial property show the following balances due January, 1919, to banking houses: Caja de Crédito Hipotecario, 458,107,897 pesos; Banco Hipotecario de Valparaíso, 12,560,626 pesos; Banco Chileno Garantizador, 35,202,539 pesos; Caja de Ahorros de Santiago, 5,093,648 pesos; Caja de Ahorros de Empleados Públicos, 6,273,666 pesos; Caja de Ahorros de los Ferrocarriles, 4,510,275 pesos; Banco Hipotecario del Sur, 25,973 pesos; making a total of 675,090,311 pesos. Of this amount 326,440,027 pesos, or 48.29 per cent., was held on the rural and city property of the Province of Santiago. The total of mortgages for 1918 was 18,144,805 pesos more than the previous year when it was 657,864,505 pesos.

The Government has extended the charter to the Llanquihue Bank for the period of 30 years with permission to increase its capital to 800,000 pesos.

The following are the principal banks in Chile, besides those already mentioned. (Figures, except otherwise expressed, are Chilean money):

Banco de A. Edwards and Co. Established in 1852. Capital, subscribed, \$25,000,000; paid up, \$10,000,000. Branch in Santiago.
 Banco de Tacna. Established in 1872. Capital, paid up, \$1,000,000. Has eight branches, and also agents in London and Paris.
 Banco Español de Chile. Main office in Valparaíso. Capital, \$30,000,000,000. Reserve fund, \$12,000,000. Has 38 branches.
 Banco Italiano. Main office in Valparaíso. Capital, paid up, \$10,000,000. Reserve fund, \$1,213,430. Has 8 branches.
 Banco Mercantil. Established in 1898. Head office at Tacna. Capital, paid up, \$500,000. Reserve fund, \$387,339.
 Banco Nacional. Valparaíso. Capital, subscribed, \$40,000,000; paid up, \$16,000,000. Reserve fund, \$6,636,696. Has 8 branches.
 Bank of Punta Arenas. Established in 1900. Main office at Punta Arenas. Capital, paid up \$2,200,000. Reserve fund, \$347,277. Branches: Bastro (Chile), and Santa Cruz (Argentina).
 Caja Hipotecaria (Land Mortgage Bank). Under State supervision. Established in 1855.
 Société Commerciale Française au Chile. Established in 1892. Head office, 5 Rue d'Antin, Paris; subscribed, 5,000,000 francs; paid up, 1,250,000 francs. Branch: Valparaíso.

Banking Holidays.

January 1, New Year's Day.—April 2, Good Friday.—April 3, Holy Saturday.—May 21, Army and Navy Day.—May 13, Ascension Day.—June 3, Corpus Christi.—June 25, Election Day.—June 29, St. Peter and St. Paul.—August 15, Assumption.—September 18-19, National Independence Days.—November 1, All Saints' Day.—December 8, Immaculate Conception.—December 25, Christmas Day. The day of the Presidential Election is a holiday. Banks close at 2 p. m.

EXPORTERS DRAFTS.

Bills maturing 90 days after arrival of goods at Valparaiso and up to 120 days after arrival at Iquique, are customary, importers paying cost of exchange, occasionally discounting, and rate for collection. The collecting rate for Valparaiso is one-fourth of 1 per cent. and for other banking centers one-half. Chilean customs' regulations do not permit of bills of lading being made out "to order."

MONEY.

The currency is mostly paper. The time fixed for the conversion of legal tender paper money which had been fixed for January 1, 1919 was postponed on account of the unsettled conditions of the exchange market. In 1907 the President issued, under the law which came into force September 12, 1907, 30,000,000 pesos in legal tender paper money, and in 1915, 22,429 gold coins of the value of 448,580 dollars gold pesos were struck and 9,901,075 silver coins of the value of 6,306,047 dollars currency.

Chilean money is based on the gold peso of the weight of 0.5951 gram, 0.91633 fine. The gold peso furnishes the unit for financial and foreign exchange quotations, having a value of \$0.365. The paper peso is divided into 100 centavos. Gold coins are of 20, 10, and 5 pesos, respectively, but these are seldom seen. There are notes in multiples of the paper peso, a silver peso, and coins of 40, 20, 10, and 5 centavos silver; with 2½, 2, 1, and ½ centavos copper.

Chile has a gold currency and an inconvertible paper currency, the latter having been subject to great fluctuations. The par value of the gold pesos in 18d. sterling and the exchange value of the paper peso has varied from 18d. to as low as 8d. in 1906. At the outbreak of the war exchange fell to 7d., but ever since that date has been steadily rising, standing about 15d. This has been due to the great preponderance of exports over imports, and to the fact that the balance has not been redressed by sufficient importations of gold.

The Government has authorized the coining of 20,000,000 pesos, nickel, in 10, 20, and 5 cent pieces, and copper 1, and 2 cent pieces, also the coining of 5,000,000 pesos, silver in 1-peso coins. The 4,600,000 one peso bills now held in the fiscal office of the issuance of currency were ordered issued to replace worn 1-peso bills. The composition of the nickel coins is 25 per cent. nickel. The composition of the copper coins is 95 per cent. copper, 4 per cent. tin, and 1 per cent. zinc. The silver coins are 50 per cent. silver, 9 grams in weight and 29 millimeters in diameter. The law also provides that nobody shall be obliged to accept more than 50 pesos in nickel money.

INSURANCE.

In 1919 there were 13 life insurance companies in operation in the Republic, 9 of which were national, 2 American, and 2 English. Foreign fire insurance companies had 22 agencies in

operation, 6 of which were German and 16 English. There were also 53 domestic fire insurance companies doing business in the Republic, and 9 foreign maritime companies, 8 of which are English and 1 German.

The amount of fire insurance written in 1918 aggregated 2,119,749,756 pesos, an increase of 531,156,220 pesos over that of 1917. The value of life insurance policies taken out in 1918 was 59,511,660 pesos as compared with 45,141,506 in 1917. Maritime insurance in 1918 decreased in the sum of 3,981,290 pesos.

The license taxes of these insurance companies in 1918 aggregated 253,000 pesos, while the 2 per cent. tax on premiums of fire insurance companies amounted to 546,766 pesos, or 35,729 pesos more than in 1917.

The summary of the business carried on by fire insurance companies and the 2 per cent. tax on first profits during the first six months of 1919 was as follows: Total insurance, 1,275,766,596 pesos; less reinsurance, 889,575,318 pesos, net profits, 8,755,552 pesos; 2 per cent. tax, 175,119 pesos. Of the 78 insurance companies operating in Chile, 55 are Chilean, 17 English, and 6 German.

A new insurance company called "La Polar" has been formed in Magallanes with a capital of 600,000 pesos.

The following are the principal insurance companies operating in Chile:

New York Life; Equitable of New York; Sun Life of Canada; La Sud America; Norwich Union; Liverpool and Landon; Phoenix Assurance Co., Ltd.; La Franco-Chilena; North British and Mercantile; Boka de Comercio; La Alianza Chilena; La Española; Americana; Salvadora; London Assurance Corporation; Atlas, Alliance and Guardian Assurance Companies.

PUBLIC WORKS.

The large irrigation canals are now under construction in Chile, namely, at Maule, Laja, and Melado, at an approximate cost, respectively, of 8,400,000 pesos, 1,978,000 and 4,890,000 pesos. These canals will irrigate lands to the extent of 116,608 hectares.

Chile continues to plan and execute various public improvements. Bonds in the sum of forty million pesos are to be issued therefor. A road from Colquecura to Coalemu is to be built. A system of drinking water is to be provided in the city of Lautaro. Santiago, the capital city, is to have a new State House for which an appropriation of 400,000 pesos has been made.

An appropriation of 97,000 pesos for the purpose of establishing a fumigating plant in Los-Andes has been approved. Twenty-three thousand pesos have been appropriated for the construction of water works in Illapel, to supply drinking water.

In a cabinet meeting called by the President in Santiago in August, 1918, for the purpose of making a plan for the construction of public works, it was agreed to carry out some 60 projects at an approximate cost of 40,000,000 pesos in bonds.

The projects include 8 railroads; 22 schools buildings; 12 barracks for the army; 9 waterworks; various roads and bridges; a courthouse; a mint in Santiago; the sewer system of Coquimbo, Temuco and Talcahuano; and the reconstruction, in Copiapo, of several public buildings destroyed by the earthquake.

The finance committee of the House of Deputies of the Congress made a favorable report on the bill authorizing the President of the Republic, for a period of three years, to contract for account of the municipality of Iquique a loan of £300,000 guaranteed by the National Government. This loan is to bear interest at the rate of 5 per cent. per annum, and provides for an annual sinking fund of not less than 1 nor more than 2 per cent. The proceeds of the loan may be delivered in installments of not less than £50,000 as the money is needed. This money is to be expended in the construction of sewers, the paving of the streets, the erection of a model market, enlarging and improving the slaughtering house at Iquique, and in the construction of sewers and in the equipment of the fire department at Caleta Buena.

The recently completed Maucó Canal, fed from the Aconcagua River in the Department of Quillota, has been opened by governmental decree. The canal, which is 80 kilometers long and will irrigate 5,000 hectares, cost 2,150,000 pesos, and it is estimated that the value of the land it irrigates will be increased by 10,000,000 pesos.

The city of Iquique proposes to build houses for its workmen and has considered an initial appropriation of 100,000 pesos for that purpose. The houses will be small, of a uniform plan, hygienic and comfortable. The Iquique Department of Public Works plans the construction of water works estimated to cost 500,000 pesos.

The department of industry and public works recommended that Congress authorized the issuance and expenditure of the proceeds of 6,500,000 pesos of bonds in the building of irrigation dams in the Aconcagua River at the points known as "El Salto del Soldado" and "Los Leones," the former dam to have a height of 85 and the latter 60 meters. These dams would form reservoirs capable of storing 58,000,000 cubic meters of water, or a quantity sufficient to irrigate 80,000 hectares of land. At the "Salto del Soldado," the Aconcagua River has a width of 10 meters and flows between perpendicular stone walls 85 meters in height. This would form a reservoir capable of storing 28,000,000 cubic meters of water. The dam at "Los Leones," which is 3,000 meters above the level of the sea, would enable an additional 30,000,000 cubic meters of water to be stored.

A project is under consideration for the utilization of Lake Laja, a body of water about 50 kilometers long, situated to the east of the Antuco volcano and the Poleura cordillera at an elevation of 1,485 meters above the level of the sea, for irrigation purposes. The works contemplated require the construction of a tunnel 600 meters long. The total cost is estimated at 300,000 pesos.

WATER POWER.

The movement to develop in Chile the vast resources for hydro-electric power will doubtless have most important and far reaching effects. A company capitalized at \$5,000,000 is to construct near Santiago a central power station of a capacity of thirty thousand horsepower. This plant will serve the factories, old and new, especially the metallurgical industries, and also the irrigation projects in the Republic. Power will be furnished Valparaiso and Rancagua and will make possible the electrification of the Santiago-Valparaiso Railway. The electric power will be particularly effective in overcoming the high price of coal and the difficulties in obtaining petroleum.

The Government has created a commission to study the possibilities of constructing a longitudinal artery for the transmission of electric power through the section from Coquimbo to Valdivia, which, if carried out, will make available for commercial purposes a large amount of cheap power, developed from the numerous streams crossing this region.

The National Electric Power Co. has just been organized in Chile with a capital of 1,000,000 for the purpose of acquiring water concessions sufficient to develop a force of 90,000 horsepower. It is proposed to convey this power to Rancagua, Calera, and Valparaiso for industrial uses. The company plans to erect four hydroelectric plants, but for the present will confine its activities to the one located at Mañtenes, where there is a waterfall of 183 meters, capable of producing a force of 30,000 horsepower.

The Minister of Finance has issued a decree authorizing the request for tenders for the installation of an electric lighting and motive power plant to supply the port needs of Valparaiso.

A company has been organized for the utilization of water power from the Maipo and Colorado Rivers very near the city of Santiago, in order to supply the capital city of Chile with electricity, in practically unlimited amounts, for power and lighting purposes.

There are thirty-four tramway lines, operating 254 miles of track in Chile, carrying an average of over one hundred million first class and forty-five millions second-class passengers per year. The number of cars is about one thousand. Some of the principal tramway, light, and power companies now operating are the following:

The Cia Alemana Transatlantica de Electricidad is a German company that furnishes electric power to Buenos Aires. It controls, through stock ownership, the Tranvias Electricos de Valparaiso, operating the street railroads of Valparaiso, and the suburb of Vina del Mar, and the Santiago Electric Light and Tramways Company. Of these two companies the former is nominally American and the latter British. This company develops its power from the Mapocho River, operating one of the two large hydro-electric plants in Chile, the other being owned by the Braden Company.

Mitrovitch Bros., a local concern of Russian origin, controls the electric lighting plant of Antofagasta.

The Tatal Railway, a British corporation, furnishes the electric power for Tatal.

The Cia General de Electricidad Industrial holds the lighting and power concessions for the towns of Rancagua, Temuco, Chillan, Curico, Lo Brava, and San Fernando, all in the southern region.

Electric power is extensively used in the mines and nitrate fields. Where water power is available, Diesel engines, or steam generated by coal or fuel oil boilers, are used.

FOREIGN INVESTMENTS.

Thanks to the stability and enterprise of the Chilean Government, large sums of foreign capital have been attracted to the field. While a very large proportion of the money has gone into nitrate and mining enterprises, considerable sums have been invested in national loans, railroads, public utilities, banks, etc. Investments have generally been successfully, proportionately more successful than in many other Latin-American countries. A recent estimate from official sources, placed Great Britain's investments at approximately \$340,655,000.

The United States is second on the list of nations. The Chile Copper Co. and the Braden Copper Co., the largest security interests in Chile, are controlled by Americans.

Americans are interested in other mines, smelters, banking, etc. American investments in Chile are estimated at \$225,000,000.

Germany holds a fair sized amount of Chilean bonds, and has invested about 5 per cent. of the capital employed in the nitrate industry. German merchants and importers are numerous in Chile, and German capital is invested in banks and insurance companies. About 5 per cent. of the fire insurance business is handled by German companies (47 per cent. by British companies). In and about Valdivia, in south-central Chile, Germans control a shipyard, a sugar refining plant, a plant for the extraction of fiber from flax, a brewery, and a number of saw-mills and other enterprises. The public utilities in Valparaiso and Santiago are also partially under Teutonic control. Germany's total investments in Chile are about \$75,000,000. French capital has been placed in Government loans, the iron and steel industry, a bank, and a limited number of other enterprises, while Holland and Belgium hold a number of Chilean national bonds. A Norwegian company, registered in Santiago, owns a steam fleet engaged in the whaling industry, and there is a small amount of Argentinian capital in southern Chile and Peruvian capital in Arica and Tacna.

METRIC SYSTEM.

The metric system is gaining ground in Chile. The Government requires all work under official order to be according to metric units. Even in the machine shops, where English machinery with English measures is used, many concessions must

be used for orders to metric measures. The nitrate trade uses the metric system, and construction work is ordered in metric units.

The metric system is used universally for sizes of clothing. Many of the country districts still cling to the old units, but in all the larger cities and towns piece goods are sold by the meter, and it is essential that invoices and all shipping documents contain the metric equivalents.

PRINCIPAL DEALERS IN CHILE.

SANTIAGO.

(Names and Street Addresses Are Given.)

Haberdashers.

Sofia Aguila, Prat 513; Angel Alpe, Eyzaguirre, 1358; Antoni Molleda y Co., Delicias 42-6; Manuel Arregui, S. Diego 2057; Eulogio Berguecio, S. Diego 432; Besa y Co., 21 de Mayo 617; Batteley y Co., Puente 565; L. A. Bonci, Delicias-Avenida Vicuña M.; Bruna y Co., S. Antonio 176; Angel Campodonico, Delicias 1704.

Furniture.

Tobar Ampuero y Co., Galvez 44; Carlos Ampuero, Delicias 1163; Zacarias Atienza, Delicias 872; Augusto Bascuñan, Nataniel 30; Manuel Bustamante, S. Diego 51; Eduardo Bresciani, Estado 47; Julio Brunetti, Prat, 771; German Bruhun, Agustinas 889; Francisco Bueno, Condor 951; Ramon Cabrera, S. Diego 34.

Novelties.

G. Burgalat, Huerfanos 990; Kaplan Katz Brenner, Sto. Domingo 1579; V. E. Muzard, Moneda 957; Pray Co., Huerfanos 1059.

Umbrellas.

Pedro Zentenac, A. Prat 24.

Perfumers.

Juan Araya, E. Matucana 816; Salvador Brun, Ahumada 156; Luis Gerani, S. Francisco 533; Pedro N. Godoy, Ahumada 191; Gonzalez y Co., S. Diego 444; Hardy y Co., Huerfanos esquina Ahumada; Luis A. Herrera, S. Diego 1861.

Watches.

Simon Alullama, Merceu 308; Jose Anrique, Eyzaguirre 1009; Jose Avellaneda, S. Antonio 44; Antonio Brisonne, Agustinas 962; Luis Caceres, Bandera GV; Luis Campbell, S. Antonio 34; Jose Candellari, S. Diego 152; Cantovel e Hijo, Moneda 919; Alfredo Desimoni, S. Diego 211; Jorge Eckart, Bandera 65.

Ready-made Clothing.

Hnos. Abad, Delicias 2987; Artigas y Co., Delicias 1504; Juan Benedicto, Puente 716; Tomas Canales, Maestranza; Osorio y Cartagena, S. Pablo 3274; Trinidad Contreras, Delicias 109; Cordero y Co., Maestranza 560; Maria Chamudes, Delicias 2754; Epifanio Ezquerro, S. Pablo-Maipu; Luis Garcia, Puente 601.

Tailoring.

Suc., Abadie, Prat 20; Abella y Co., Catedral 2296; Francisco Abié, Agustinas 1025; J.P. Abienzo, Balmaceda 19; Vicente Aceña, Merced 806; Francisco Alcazar, S. Diego 257; Ventura Alonso, Ca-

tedral 1077; Carbone y Andretta, Estado 169; Richardo Aranedas, Agustinas 833; Javier Arenas, Rosas 1084.

Hats.

Antonio Alesan, Agustinas 689; Mme. Alexan, Pje. Matte 49; Eloisa Andrade, S. Diego 47; Cesar Andrei, Puente 685; Hnos. Andreu, Bellavista 1229; Carmela Argomedo, S. Diego 331; Bucarelli y Co., S. Diego 231; Zolla de L. Cajas, Delicias 2634; Rosa Calderon, S. Diego 331; Hnos., Cappellaro, Estado 230.

Drugs.

Hnos. Andrade, S. Diego 591; F. Aranda, Delicias 601; B. Aranda, M. Acevedo, Catedral 1497; E. Alcaino, Delicias 2093; A.P. Alday, S. Pablo 1186; E. Ampuero, Oelicias 26,12; A. Andrade, Delicias 2902; 2902; Hnos. Andrade, S. Diego 591; F. Aranda, Delicias 601; B. Aranda, Independencia 748; Juan Araya, Maturana 826.

Gloves.

A. Merlot, Agustina 803.

Iron.

Lyon Balfour y Co., Delicias 1751; Jose Barbaglia, S. Antonio 36; Saavedra y Cousifio, Matucana 1283; Heriberto Covarrubias, Ahumada 868; Rafael Cruchaga, S. Diego 1069; Juan Lalanda, S. Antonio 831; Lazonby y Co., Deleclias 1134; Delgeon y Martinot, Agustinas 3184; Roberto Torretti, S. Ignacio 500; Camilo Pizarro, Eyzaguirre 1259.

Jewelry.

S. Basilio, Independencia 361; A. Boudin, Moneda 822; Antonio Brisone, Agustinas 962; Julio Brosse, Huerfanos 927; Juan Carderon, S. Antonio, 468; Leopoldo Cohn, Ahumada 315; Jorge Delk, Ahumada 179; A. Desimoni, Ahumada 274; V. Emmanuel y Co., Huerfanos 917; B. Espildora, Alameda La Equitativa.

Booksellers.

C. Baldrich, Huerfanos, 1032; A. Blindis, Ahumada 125; A. Calvo, M. Bandera 251; J. Diaz Lira, Compania 1015; J. Gallardo, S. Antonio 477; Ramon Garin, Ahumada 328; J.W. Hardy, Huerfanos 1016; F. Lathrop, Ahumada 268; G. Miranda, Compania 1095; J. Nacimiento, Ahumada 265.

Shoes.

Mariano Acin, Prieto 1251; Jorge Aguilar, 21 de Mayo 695; Jorge Alegria, S. Isidro 147; Ignacio Aliaga, Bandera 767; Johnson Alonso y Co., Ahumada 174; Pedro Ancich, Ahumada 220; Manuel Aranda, 21 de Mayo 591; Julio Aranedas, Chacabuco 26, A.; Valentin Arce, Præ, 133; Sara Armazan, S. Pablo 2499.

VALPARAISO.

Foodstuff Importers.

Hnos. Agullo y Co., San Donoso 69; Arestizabal y Co., Prat 27; Bahre Herbest y Co., Brasil 176; Besa y Co., Blanco 390; Antonio Cambasso, Olivar-Chacabuco; C. Campodonico y Co., Merced 98; Miguel Gariola y Co., Blanco 404; Pelegrino Gariola y Co., Blanco 402; J. Caro y Co., Tivola 10; Andrade y Delpino, Blanco 308; Enrico Dell' Aqua, O'Higgins 40; Angel Demaria, Tivola 32; Fox Duncan y Co., Blanco 144; Ferro Sanguinetti y Co., Cochrane 449, Blanco 442; Fonk y Co., Brasil 126; W. R. Grace y Co., Prat 1; Grangam Rowe y Co., Cochrane 619; Soffia Gonzales y Co.; Horman y Co., Brasil 54; Ruth y Co., Prat 75 y 85; Roberto Lutjens, Esmeralda 102; A. MacGaw y Co., Esmeralda 15; Hnos Medina Argandona,

Cochrane 28; Hnos. Molfino, Brasil 245; Passalacqua y Co., Brasil-Morris; Enrique Reimer, Blanco 344; Rogers y Co., Blanco 293; Samuel S. Sanchez, Casilla 234; Hnos. Schiavetti, Brasil; Ricardo Schultz y Co., Ave. Brasil, 54; The London y Chilean Comercial Co., Ltd., Prat 76; Weir y Co., Esmeralda; Weir Scott y Co., Prat 29; Wessel Duval y Co., Cochrane 561; Francisco Zerega, Chacabuco 326.

Novelties.

W. R. Bayle y Co., Esmeralda 7; C. Batteley, Serrano 98; Burmeister y Co., P. Pinto; J. Challe, Condell; Alexandro Ganua, Condell 137; J. W. Hardy, Esmeralda 11; Luis Paludan, Esmeralda 118; W. G. Paton y Co., Esmeralda 2; Enrique Petronio, Serrano 99; Conrado Rokle, Condell 51; Ines Rose y Co., Plaza Independencia; Simon y Co., Condell 147; Mauricio Weinstein, Condell 84.

Automobiles.

M. Duhart.

Bicycles.

M. R. S. Curphey, Blanco 441.

Footwear Importers.

J. P. Arancibia, Bellavista 10.

Importers of Cement.

Establecimientos Americanos Grady, Blanco 484; Gibbs y Co., Cochrane 609; W.O. Grace y Co., Prat; Luis Piza y Co., Cochrane 479; Innes Rosse y Co., P. Sotomayor; Benard Saavedra y Co.; Duval Wessel y Co., Cochrane 561; Williamson Balfour y Co., Blanco 144.

Importers and Exporters.

R. Acevedo, Cochrane 117; H. Acosta, Almirante Riveros 78; Pio del Agua, Victoria 302; Braga Aguiar y Co., Cochrane 433; Hnos. Agullo y Co., S. Donoso 69; Juan B. Alberti, Tivola 52; Allardice y Co., Blanco 304; J. Allaun, Esmeralda 62; Gregorio Amezaga, Condell 201; Benitez y Amos, Blanco 18; Marcial Q. Aravena, Blanco 448; Arestizabal y Co., Prat 69; C. Arnold y Co., Esmeralda 66; Francisco Arrieta, Delicias 241; W. E. Ashieroft, Cochrane 626; Manuel Aste, Clave 78; Aycaguer Duhalde y Co., Victoria 191; Enrique Bahre, Blanco 174; A. Canepa, Blanco 99; G. Campodonico y Co., Merced 93; Davis y Co., Condell 10; H. J. Ducan, Blanco 302; P. Escobar, Serrano 11; M. Fernandez, Tivoli; Grote y Co., Esmeralda 47; Guerin Freres, Blanco 374.

Electric Goods.

W. R. Grace, Prat; Greenwood y Hallgarth, Blanco 1026; Huth y Co., Cochrane 384; Luis Kohn, Esmeralda 52; Martin Brothers, Blanco 174; Morrison y Co., Blanco 102; Bernard Saavedra y Co., Condell 42; Siemens Schuckert Ltd., Blanco 366.

Drug Stores.

Jorge Ankelen, Victoria 94; J. Araos, Rodriguez 4; Ramon Aros, Placeres 98; Felix Bellicia, Victoria-Delicias; Manuel Briceño, Pje. Quillota 395; Campos y Co., Las Heras 43; Curt Carliczek, Esmeralda 26; L. E. Cuadra, Victoria 304; A. Esquivel, Victoria 30; Waldo Gonzalez, Maipo 147; Alberto Marambio, Placeres 35; J. A. Mesa, Maipo 371; A. Meyer, Condell 56; G. de D. Novajas, Delicias 76; Carlos Osorio, Av. Colon; Osorio y Hurtado, Buin; Eduardo Pacheco, Valparaiso 80; L. G. Paggi, Independencia 151; Alberto R. Silva, Victoria 50; Luis Silva, Independencia 54; Soto y Co., Victoria 250; Ramon Soto, Merced esq. a H.; Andres Toro, Bellavista 35; Clemente Torreti, Victoria 250; Truccios y Co., Independencia 164; R. S. Varas y Co., Baron 64; Miguel Venegas, Sub. Portales 61; Vogt y Co., Condell 3-5.

Produce Exporters.

José Devoto y Hnos., Yungay 814 y 816; W. R. Grace y Co., Prat; O'Shea Hammersley y Co., Cochrane 689; The London y Chillian Commercial Co., Ltd., Prat 76; Williamson Balfour y Co.

Dry Goods.

Braga Aguilar y Co., Cochrane 433; Hnos. Digheros, Esmeralda 104; W. R. Grace y Co., Prat; Julio Polanco, Cochrane 2-8; The London y Chillian Commercial Co., Ltd., Prat 76; Wessel Duval y Co., Cochrane 561.

Machinery and Hardware.

Morrison y Co., Blanco 102; J. G. Seurle e hijos, Cochrane 676; Williamson, Balfour y Co.; Siemens, Schuckert, Ltd.; Balfour, Lyon y Co., Blanco 172-6; Scott Beaver y Co., Prat 285; Burmeister y Co., A. Pinto 55; Suca de Juan E. Cluaref, Blanco 308; Arnoldo Droste, Blanco 181; Gibbs y Co., Cochrane 609; W. R. Grace y Co., Prat; Graham Rowe y Co., Cochrane 611-619; Huth y Co., Yungay 53; J. Limozin y Co., Condell 42; Martin Brothers, Blanco 174; Mex y Schauenburg, Brasil 152; Innes Rose y Co., Plaza de Sotomayor; Bonard Saavedra y Co., San Agustín 6; J. G. Searle e hijos, Cochrane 675; Urmeneta Parker y Co., Serrano 137; Vorwerk y Co., Prat 231-239.

Notions.

Lyon Balfour y Co., Blanco 176; Besa y Co., Blanco 390; Betteley y Co., Blanco 106; Pelegrino Carlola, Blanco 308; Gibbs y Co., Cochrane 609; Grace y Co., Prat; Gaunther y Co., O'Higgins 33; Hegtensberg y Co., Brasil 54; Horman y Co., Blanco 414; Huth y Co., Prat 75-85; J. Limozin y Co., Condell 42; Morcon y Co., Pl. Pinto 63; Hnos. Moreno, Cochrane 241; Morrison y Co., Blanco 102; Farmann y Krebs, Av. Brasil 52; Rosse Innes y Co., P. Intendencia; Samuel Sanchez Casilla 234; Schill Seebolm y Co., Ltd., Cochrane 343 y Blanco 342; Urmeneta Parker y Co., Serrano 137; Vega Noriega y Co., Victoria 37.

Furniture.

Remigio Acevedo, Cochrane 292; German Bruhn, Condell 175; Salvador Ceardi, Victoria 279; L. Ghevesich, S. J. de Dios 112; Tomas Dutra, Independencia 87; Hnos. Elordi, Tivola 130; Adolfo Escobar, Tubildad 69; Julio Galea, Urriola 27; Antonio Giordano, Condell 172; S. M. Guarda, Rodriguez 28; R. Herrera, Victoria 517; Gorlier Jouye, O'Higgins 68; Federico Kersinger, Yungay 3; Sers. de Jose Mazzini, Serrano 124; Enrique Merkel Urriola 22; Julio Mortan, Jaime 8; Muzard, Condell-Huito; Hnos. Orcos, Victoria 443; Natalio Ramella, S. Agustín 74; Simon Ries, Victoria 245; H. Rosales, Victoria 114; Remigio Salgado, Condell 78; Julio Seckel, Esmeralda 93; P. C. P. Serei, Cumming 1; Jorge Simonsen San Enrique 28; J. B. Ugarte, Independencia 184; Hnos. Valle, Victoria 63; C. Vignolo, Retamo 27.

Stationery

Cuspinera Teix y Co., Tubildad 36; Besa y Co.; Gibbs y Co., Cochrane 609; Jose S. Buonocore, Condell 23; Chaboche y Petit, Edwards 58; Pablo Figallo y Co., Yungay 370; Adolfo Figueroa, O'Higgins 15; Hnos. Higgs, Victoria 526; Pablo Klaunig, O'Higgins 31; Isidro Martinez, Independencia 51; Juan Moreno, Victoria 224; Domingo Palma, O'Higgins 12; Federico Videla, Av. Brasil 1.

Watches.

Cristino Arancibia, Independencia 234; Alberto Arrendondo, Chacabuco 188; B. Becker y Co., Prat 1; Lisandro Bogardus, Independencia 234; Hnos. Brunschwing, Esmeralda 36; Hnos. Cahen, Esmeralda 92; J. B. Diaz, Colon 84; Eugenio de Gellert, Cochrane 134; Adolfo Golditz, Cumming 62; Jorge Gonzalez, Poniente 270; Julio R. Gutierrez, Bellavista 71; Marte Iriarte, Victoria 284; A. Kauff-

mann, Serrano 161; Guillermo Klickmann, Condell 11; Hnos. Michel, Victoria 254; Federico Moller, Cochrane 185; Pedro A. Onate, Pasaje Quillota 375; Luis Picone, Poniente 164; Jose Pezino, Riveros 4; Hnos. Poblete, Esmeralda 40; Quelice y Co., Delicias 76; Alfredo Ravani, Victoria 527; Valencia y Ravani, Victoria 475; Conrado Rolke, Condell 51.

Tallors.

H. Anselme, Esmeralda 14; Hipolito Barros, Pl. Victoria; Hipolito Bonguin, Esmeralda 90; Angel de Castro, Victoria 342; Cacinto Cobos, Condell 588; Julio Fenner, Esmeralda 6; Enrique Folx, Condell 126; Grote y Co., Esmeralda 47; Miguel Lopez, Serrano; MacGrath y Co., Cochrane 160; Silvio Mantellero, Condell 28; S. Newman, Condell 37; German H. Nieto, Condell 30; Rosa y Co., Prat; Carlos Samame, Serrano 44; E. Tomasetti, Esmeralda 86; Demetrio Villanueva, Condell 94; Eduardo Zuike, Esmeralda 48.

Hat Importers.

Francisco Beduneaud, Esmeralda 99; T. A. Blech Wegener, Condell 7; Sanchez y Estart, Blanco 469; Hnos. Girardi, Blanco 569; Rodriguez y Villarreal, Victoria 70.

Shirts.

Angel de Castro, Victoria 342; E. U. Matas y Co., Esmeralda 74; Pineiro Correa y Co., Condell 73; Rodolfo E. Rojas, Serrano 44.

COLOMBIA.

The Republic of Colombia is the fifth largest country in South America, being smaller than Brazil, Argentina, Bolivia and Perú, and larger than Ecuador, Chile, Uruguay, Paraguay and Venezuela. It is one of the most thickly populated, however, its density of population being exceeded only by Uruguay and Ecuador.

It covers an area equivalent almost to that of the South Atlantic and East South Central States combined.

Colombia has not recognized officially the Independence of Panama, a treaty to that effect with the United States pending ratification.

According to the census of 1912, the area and population of the 14 departments and intendencies was:

Department	Area sq. miles	Total	Per sq. mile
Antioquia	22,752	739,434	32
Atlántico	1,008	114,887	114
Bolívar	22,320	420,730	19
Boyacá	16,460	586,499	36
Caldas	7,380	341,198	46
Cauca	20,403	211,756	10
Sundinamarca	8,046	713,968	88
Huila	8,100	158,191	19
Magdalena	19,080	149,547	7
Nariño	9,360	292,535	31
Santander Norte	6,255	204,381	32
Santander Sur	17,865	400,084	22
Tolima	10,080	282,426	28
Valle	3,897	217,159	56
Intendencias:			
Chocó	68,127	739,434	—
Meta		29,309	—
Commissaries:			
Arauca	—	4,922	—
Caquetá	—	24,534	—
Goacuetrá	—	53,013	—
Juradó	—	8,207	—
Putumayo	—	31,380	—
Urabá	—	6,476	—
Vaupés	—	5,545	—
Grand Total	440,846	5,071,101	11.5

About 30,000 uncivilized Indians are not included in this list.

Complete and tabulated returns of the census taken in 1918 are not yet available.

According to unofficial reports the census of the population of the departments of Antioquia, Bolívar, and El Valle in 1918 was as follows: Antioquia, 817,530 inhabitants, of whom

79,146 were residents of the municipality of Medellín; Bolívar, 456,212 inhabitants, of whom 51,382 represent the population of Cartagena; El Valle, 271,630 inhabitants. Antioquia has increased by 76,593 inhabitants, and Bolívar, 40,783, in the last six years.

The population of the Department of Atlántico was reported to be 143,673 inhabitants. Barranquilla, capital of the department, increased 15,647 in population since 1912.

The Department of Nariño gave a total of 362,934 inhabitants, showing that since 1912 there was an increase of 70,400.

According to official figures the population in 1918 of the Department of Caldas was 428,138 inhabitants, of whom 104,688 are farmers, being 24 per cent. of the population.

The official report gave the population of Bogotá, which in 1912 numbered 121,251 at 137,890 in 1918, having increased by 16,639 in the past six years.

The population of the Department of the Atlantic was 134,673, of whom 64,554 represent the population of Barranquilla.

A census of the city of Medellín showed a population of 47,354. The district of Medellín, including the city, villages, and rural inhabitants, contains 75,354 people.

The city of Cali has a population of 45,500.

The country is divided by geographical barriers into five sections.

The Department of Antioquia is mountainous, the climate tropical and temperate, according to altitude.

The central plateau has a temperate climate, the altitude being 8,000 feet. Bogotá, is the capital of the country and the principal city of the section; the American Legation is located there.

The Pacific coast section is mountainous, tropical and temperate according to altitude. Cali, Buenaventura, Popayan, and Tumaco are the most important cities.

The eastern section embraces the territory between the Magdalena River and the Venezuelan border and north of the Bogotá Plateau, it is mountainous, tropical, and heavy wooded. The chief cities are Bucaramanga, Ocaña, and Cucuta.

POLITICAL ORGANIZATION.

The Republic of Colombia, by the constitution adopted August 1st, 1886, abolished the Federal Union and the sovereignty of the several States and adopted the unitary republic form of government, with legislative, executive, and judicial branches.

The Senate, and the House of Representatives constitute the National Congress. They are instructed with the legislative power, the former chamber consisting of 35 and the latter of 92 members. Senators are elected indirectly for a term of four years by electors chosen for the purpose, and representatives are elected by direct vote of the people for a term of two years, at the rate of one for every 50,000 inhabitants.

Two substitutes are elected for each senator and representative to replace them in case of absence or inability to serve. Congress meets at the capital, Bogota, every year on July 20, for a period of 90 days, which may be prolonged for 30 days, or be called in extra session by the President.

The President is elected by direct vote of the people for a term of 4 years. There is no vice-president, but two *designados*, first and second, elected annually by the Congress, succeed the President, respectively, in case of his absence, death, or inability to serve.

The latest election of members of Congress took effect on the 11th of May, 1919.

The President is assisted by a cabinet of eight members who are the heads of their respective departments.

Personnel of the Government

President, Marco Fidel Suarez (inaugurated August 7, 1918).

First Designado, General Pedro N. Ospina.

Second Designado, General Jorge Holguín.

The Presidential Cabinet is as follows: Dr. Luis Cuervo Marquez, Secretary of Interior; Jorge Roa, Secretary of War; Pomponio Guzman, Secretary of Finance; Dr. Miguel Abadía Méndez, Secretary of Public Instruction; Dr. José María Pasos, Secretary of the Treasury; Jesús del Corral, Secretary of Agriculture and Commerce; and Laureano García Ortiz, Secretary of Public Works.

A law enacted by Congress on August 23, 1918, and promulgated on the 27th of the same month, modified article 44 of the Constitution and provided that all persons shall have the right to engage in any honorable calling or occupation, without belonging to institutions of learning. The authorities have the right to inspect industries and professions in so far as they concern public morals, security and health, to order the revision of fees and the rules and regulations of public transportation companies; and to require certificates of competency for the exercise of law or medicine.

On November 13, 1918, A General Arbitration Treaty was concluded in Bogota between the representatives of the Governments of Bolivia and Columbia, under the terms of which the contracting parties agree to submit to arbitral decision all controversies of whatever nature that may arise between them, provided always that such controversies are not settled through diplomatic channels, with the sole exception that questions within the usual jurisdiction of the courts of the countries are not covered by the treaty. The arbitrators are to be appointed from among the heads of the States of the American countries, or from among judges or experts of the American Republics. Should there be no agreement concerning the appointment of arbitrators, the high contracting parties shall submit their differences to the permanent court of arbitration in conformity with the provisions of the Hague Convention of October 18, 1907, and in accordance with article 43 of said pact. In each particular case the parties shall sign an agree-

ment for determining the nature of the dispute, the formation of the arbitral court, and the rules of procedure. This treaty is to remain in force for a period of 10 years, and if not abrogated at the expiration of that time it is understood that it will be renewed for another period of 10 years and so on successively.

On June 9, 1919, in Cartagena commissions from the Governments of Colombia and Ecuador signed a treaty defining the boundaries between the two countries.

AGRICULTURAL PRODUCTION.

Corn, sugar cane, sea-island cotton, rubber, cacao, bananas, fibers, tropical fruits and vegetables, are produced in the coast and hot regions of the Republic, and the mountains and uplands yield coffee, apples, peaches, berries, potatoes, wheat, barley, and in fact all of the products of the Temperate Zone. The entire country is suitable for stock raising, the pastures in many sections remaining green the year around.

The Government is willing to promote agriculture. Tracts of land suitable for clearing can be obtained either from the Government or from private owners at a reasonable cost. Titles are secure and generally date back for a long period of time, emanating from old Spanish crown grants of colonial times. The chief difficulty met with is in the case where there are a number of owners in common; such estates have been handed down for generations without any partition proceedings. The disentanglement of such cases is a tedious and costly proceeding, dragging on for years.

Another prolific source of trouble with titles is that connected with boundary disputes arising from the vagueness of early grants in defining boundaries. Lands were measured by means of "a well-twisted cord" and points were given from one mountain or hilltop to another. The vast majority of land titles in Colombia are good, however, and the foreigner can purchase with safety when acting under good legal advice. In bidding for undeveloped lands the foreigner will often encounter an exaggerated idea of values. The maximum amount of land which can be sold to any one person is 5,000 hectares.

The Department of Antioquia has 8,926,000 coffee trees in bearing, most of which are in the districts of Pueblo Rico, Jerico, Salgar and Montebello.

There are 1,305,469 cacao trees, producing in the Province of Tumaco and 2,025 cultivators in use.

The United Fruit Company owns a total of 80,000 acres of banana land in the Santa Marta district, of which it has 16,000 acres under cultivation in bananas. There are 300 private growers with a total acreage of about 14,000 in bananas. Banana growing is the principal industry and little planting of other products is done, with the exception of corn, "yucca", beans, etc., for local consumption. Plantains also constitute the principal articles of diet of the people in this district.

The Colombian coffee harvest in 1919 was said to be the heaviest in the history of the country. It was estimated at 1,250,000 sacks.

The western slopes of the lower ranges of the Sierra Nevada which are accessible from the Santa Marta Railroad, are well wooded, but the large trees of commercial value, such as mahogany, etc., are scattered and would only suffice for local manufactures, such as furniture. They are not found in sufficient numbers to be of any export value.

Aloes are found in the Rio Hach district, and there is one small plantation of aloes. The industry is in its infancy. In this region is found the largest numbers of the divi-divi tree, the pods of which are exported for tanning material.

Sugar cane grows without irrigation, an average of 60 tons being produced per hectare per annum. Some cane fields in the district are 15 years old and are still producing without fertilization or replanting. Good sugar land may be purchased for an average price of \$1.50 per hectare, although this estimate does not include stumping and plowing for immediate planting.

There is only one large sugar plantation using modern machinery in the entire coast region. This is the Colombian Sugar Company, with plantations and mill at Sincerin, known locally as the Ingenio Central. The company has a capital of \$2,000,000 and employs from 3,000 to 5,000 men, according to the season of the year. The total extent of the property, including raw lands and cattle pastures, is approximately 18,000 hectares. A total of \$1,400,000 has been invested, and plans are under way to increase the grinding machinery with three new and powerful units. An average of 2,000 hectares of cane are grown yearly without irrigation. The average production is 40 tons per hectare, although a production of 60 tons per hectare is often obtained. The value of the plant is estimated at \$1,500,000. Its capacity is 1,000 tons of cane, and an average of 100,000 hundredweight is turned out in refined sugar per annum. The percentage of extraction on the basis of weight of cane is over 9 per cent.

About 1,000,000 bags is the annual yield of the coffee crop of the Republic (bags contain 60 kilos or 132 pounds), produced by 125,000,000 coffee plants. Colombia, next to Brazil, exports more coffee than any other country and the industry is probably the most important in the country. The United States consumes the bulk of Colombian coffee. The Department of Cundinamarca, the producer of the famous Bogota brand; the Oceana, Cúcuta, and Bucaramanga districts in the Department of Santander and in the Tolima and smaller valleys of the Cordilleras are the principal coffee districts of the Republic.

The Atlantic Department Assembly has passed a law creating an agricultural experiment station and founding the Atlantic Agricultural Society.

The Ministers of Public Works and of Agriculture and Commerce were commissioned by the President to inspect the

lands adjacent to the Lake of Fuquene, and to estimate the cost of drainage of the area for agricultural and stock-raising purposes. The yield and profit should be remarkable, as the soil of this region is exceptionally fertile. The lands are located not far from the proposed railways that will open up the northern part of the country.

CATTLE.

Colombia has large areas very well suited for cattle raising. The Department of Bolivar is the principal cattle-raising region of Colombia at the present time. From 50,000 to 60,000 head of fat beef cattle are shipped into the interior of the country yearly, the Department of Antioquia taking over 50 per cent. of this amount. An average of 45,000 head of beef cattle have been shipped to the Canal Zone yearly. A contract was made with a Colombian company calling for the delivery of 70,000 head during 1919.

According to a report from U. S. Commissioner P. L. Bell, along the coast to the north in the direction of Puerto Colombia and the mouth of the Magdalena River, the territory is broken by low irregular hills which reach as far south along the Magdalena as Calamar. Immediately south of Cartagena and as far as the Cauca and San Jorge Rivers, the country is one vast plain, gently sloping toward the Magdalena to the east and toward the ocean to the north. To the west the country is also very level until the west bank of the Rio Sinu is reached. Here low hills again break the plains for some distance.

Lands near the Magdalena River or situated along watercourses connected with the river, are subject to overflow in times of heavy floods. Here are found large areas of swamp lands, which are considered excellent for rice cultivation.

South of Cartagena, a distance of approximately 30 miles, there begins a rich territory which consists of an enormous alluvial deposit extending for a distance of 60 miles, approximately, to the south and west until the hills are reached.

The country is heavily wooded with first and second growth of hardwoods, and cut up with shallow watercourses, small rivers, etc. All cattle pastures are cleared lands. The land selected is first cleared of the light undergrowth; then axes are used on the heavy timber, which is felled at about waist height and not slashed or otherwise treated in any way. Fire is then employed to clear away the debris, the result being an extension of land more or less encumbered with large and small stumps and the large trunks of heavy trees, all partially burned.

After this operation, at the beginning of the rainy season, the Para grass is planted by digging a small hole in the soil with a sharp stick and then placing a section of the stalk in this hole and covering it with the soil. The Para grass grows extremely rapidly and soon covers the ground in every direction, although slips are planted 3 feet apart. The plant sends out runners that take new root at every joint, which in turn

sends up new shoots which form large bunches of grass. By the end of the rainy season in October, the pasture is ready for cattle and can support two head of stock per hectare.

The grass forms into large bunches around and over all obstructions, such as trunks and stumps, entirely covering these the first year. Pasture under feeding stands at about 3 feet and is even topped at a lower level in a dry year. This condition greatly aids in the gradual clearing of the land. With the rainfall and excessive heat, stumps and trunks of hardwood trees soon rot away and disappear in three to five years' time, leaving the land perfectly clear for pasture. After the third or fourth year in grass, lands are burned off during the dry season. This process clears away the dry and dead grass, and prevents the para from choking itself out by excessive growth; it also kills the ticks in the grass and aids in keeping these pests within bounds.

In the Sinú River region, there is about one-fifth of the total available pasture land now cleared and in para pasture. The total acreage in use is placed at about 100,000 hectares. Most of the easily accessible land along the river has been taken up and converted into pasture. Much good land remains south of Monteria, which is being rapidly made into pastures. In the entire Department of Bolívar the acreage covered by the cattle ranches may be estimated at approximately 500,000 hectares.

The Verastegui Cattle ranch in the region of the Sinu River is a level tract of land 4 leagues square, on which there are grazing many thousand head of cattle. It is estimated that the packing house entitled "Compañía Ganadera Colombiana" can easily obtain a year's supply of stock from the regions mentioned.

In 1915 the Colombian Government became interested in promoting the cattle industry in the country and several new laws were created, which were supplemented by a decree passed in November, 1917. A decree, passed December 4, 1917, provided for proposals in May, 1918, by the Government, in which a concession was offered to companies installing a modern packing plant in the country. At the same time the Government also passed regulations governing the operation of such establishments. There is a slaughter tax of \$1.00 gold per head on cattle and \$.10 per head for smaller animals.

One American firm, in combination with one Colombian Company, secured the concession. A time limit was set for building operations, but, although a site for the plant was selected, the war interfered with a prompt development of the plans, on account of trade restrictions. Early in 1919 the time limit for beginning operations expired and the Colombian Government refused to extend it under present conditions. Negotiations are now under way in Bogota with the National Government, which have for their object the modification of these packing-house laws and regulations.

The leading capitalists of the Department of Tolima have organized a stock-raising association in League to promote cattle raising in that section.

The middle of July 1919 the Department of Valle established in Cali a Department Bureau of Agriculture, with branches in the Provinces, which may in turn establish municipal branches.

MINERAL WEALTH.

The mineral industry is well established in some departments, notably Antioquia, while the gold deposits of the Marmato and Sucio Rivers are said to be equal to those of the Transvaal. A great mining center could be established on the entire Pacific coast of Colombia, with a little more effective development, as it is said to be formed by gold-bearing alluvial. The great gold-bearing region is found in the Department of Antioquia and in the mountain ranges that separate the Cauca and Magdalena Rivers, a large area of many thousands of miles where there is gold whenever there is gravel and veins are found everywhere back in the mountains where the rock has been laid bare.

An American mining and leasing company owns and operates a quartz mine located in the Tigui region. The plant consists of a 15-20-ton tube mill, and produces \$15,000 worth of gold monthly.

On the headwaters of the Rio Tigui a mine is located belonging to another American concern. The property is a large free-milling vein carrying an average value of \$40 per ton. Work was started seven years ago and the property has produced over \$2,000,000 worth of gold up to date. To reach the mine, a river steamer is taken at Barranquilla up to the Rio Nechi to La Raya, thence two days by canoe up the Rio La Raya, and thence, by mule trail, two days' ride to the mine.

Near the Tigui district is the Cano Urales section, in the Departamento de Antioquia, which is a very promising mining center. There are several native mills in this section, which turn out \$25,000 to \$30,000 worth of metal per month. It is a good section for prospectors. Hydroelectric power can be found everywhere and is cheap and easy to develop. The district is isolated, but there are many ranches in the region, and food is cheap and plentiful.

Mining is done with bar and pick. The best mines are at the foot of the Cordilleras and along the contact of the slate with the granite lying east and along the Tigui River.

Colombia's platinum output is exceeded only by that of Russia. This metal is always mixed with gold and comes from the gravels of the Choco district, its main source being the Platina and Condota Rivers, which are tributaries to the San Juan River. It is also obtained from some of the streams that flow into the Atrato River.

Gold is the most important mineral produced. The Breitung Mines Co., of Delaware, with a capitalization of \$1,572,590, acquired some time ago the property of the Marquette Magdalena Co. The mines have not been regularly operated. The Compañia Minera de Zancudo, with office at Medellin, operates the Zancudo, Chorres, Cateador, and Muriel gold and silver

mines and works a small smelter at Sitio-Viejo. The ores are principally gold and silver, with a small amount of copper as a by-product.

Great Britain has successfully entered the gold-mining field in Colombia. The most important British mines are the Pato Mines, the Nechi Mines, the Frontino and Bolivia Mines, etc. The Pato Mines cover an area of about 40,000 acres located near Zaragoza, Department of Antioquia. The company's capitalization consists of £100,000 shares and approximately £212,000 8 per cent. income notes. A dredge is being operated. It is controlled by the Oroville Dredging Co., through ownership of £70,000 of a total of £100,000 stock. The latter company also controls the Nechi Mines, through ownership of the £70,000 ordinary stock. The preference shares of the latter company, £70,000 outstanding, are entitled to and are receiving 25 per cent. per annum and are further entitled to one-half of the surplus profits.

The Frontino & Bolivia property was registered in Great Britain during 1911 as the successor to a company of similar name, incorporated in 1886 to acquire the original Frontino & Bolivia Co., which began operations in 1864. The company owns mines, covering about 5,000 acres, located near Medellin, its capitalization, consisting of £45,538 10 per cent. debenture stock due 1921, £23,390 10 per cent. and participating preference shares, and 140,000 ordinary shares of 1 each.

The Tolima Mining Co., another British corporation, owns gold and silver properties in Colombia, including the Frias Silver Mines and water power rights at Tolima. The authorized capitalization of this company is £100,000 par £1.

The new Timbiqui Gold Mines (Ltd.) owns gold placer claims in the Timbiqui River, the properties covering rights on about 865 square kilometers of territory. The capitalization of the company is £200,000, par £1. Operations were begun in 1907.

The Colombian Mines Corporation (Ltd.), also a British company, acquired gold mines in the Remedios district. This company began business in 1883; and during its early years paid substantial dividends. The capitalization of this company is £26,204, of which £11,204 is classed as "A" stock and 15,000 as "B" stock.

The Colombian Mining & Exploration Co. was registered in London in 1908, to acquire gold and silver properties in the districts of Supio and Marmeto and in the municipalities of Apia, San Clemente, Ansermavietj, Sucio, Rio Sucio, Nazaret, and Marmeto. The principal property was known as the Marmeto Hill Mine, and considerable development work has been carried on there. The capitalization consists of £50,000 6 per cent. debentures and £450,000 stock. A receiver was appointed in 1915 on behalf of the debenture holders.

The Palenque Gold Mining Syndicate, formed in 1893, acquired a hydraulic property located at Palenque, Department of Hondo. This property in 1909 was leased to another company for 10 years in consideration of 25 per cent. of the prof-

its. The capitalization of the company consists of £20,000 priority and £50,000 ordinary shares, par 1.

The Platinum & Gold Concessions of Colombia (Ltd.), a Belgian company, capitalized at £86,573, acquired alluvial platinum and gold properties known as the Bajo Opogado, located not far from Novita, Colombia. The property is about 15 kilometers in length by 2 kilometers in width.

A French company known as the San Antonio Gold Mines Co., (Ltd.), registered in 1912, acquired a gold mine concession near Cali, Department of Valle. The capitalization of the company at the time of formation was £70,607.

The estimated gold production of Colombia since the Spanish conquest has exceeded \$600,000,000. During the same period probably \$30,000,000 worth of silver has been produced.

The number of gold mines denounced in the Department of Antioquia in the year 1918 was 289.

A British report concerning the platinum and gold fields of the Choco district states that there has been an increase in platinum production in the region referred to during the period of 1911 to 1917, inclusive, of 300 per cent. The approximate output of this district in 1911 was 12,000 ounces; in 1912, 15,000; in 1913, 15,000; in 1914, 17,500; in 1915, 18,000; in 1916, 25,000; and in 1917, 50,000 ounces.

During 1918 there were 88 mines denounced in Choco, and up to May of 1919 5 more were denounced. From 1907 up to 1919 2,471 mines have been denounced in that territory.

Owing to the richness of the country in gold and silver, little attention is paid to the copper ores which are very abundant. Copper ores are found in the Ocana and Velez districts, in the Department of Santander, in the districts of Moniguica and Santa Rosa, in the Department of Boyaca, and in the Department of Antioquia.

There are many reports and rumors of rich copper deposits, coal, and also alluvial gold in the Valle de Upar district near the towns of Fonseca and Villanueva, but no definite information can be obtained.

This region is accessible only from Rio Hacha by mule train, a journey of five days; or from Fundacion, the end of the Santa Marta Railroad, consuming about the same time. W. E. Damé, who spent October, November, and December there says that the copper was in pocket deposits, very rich ore, and, in the aggregate, an enormous amount, which it would well pay to work. He also reported many heavy veins of coal.

There is a large deposit of cement material located 35 miles from Santa Marta at a distance of two miles from the railway.

A concession has been granted by the Government to exploit the deposits of guano found on the islands known as "Los Monjes" belonging to the peninsula of La Goajira.

Large copper and iron deposits have been discovered in the municipality of Ataco, Department of Tolima.

By law No. 43 of 1919 the Maritime salt mines of the Atlantic coast were ordered exploited.

In April, 1919, the exploitation of certain silver, lead, and

zinc mines in the vicinity of Ubaté, Department of Cundinamarca, was begun. The mines are the property of the Colombian Metallurgical Co.

THE SALT MONOPOLY.

A new law concerning salt deposits has been promulgated. Under this law all the maritime salt deposits belong to the nation and are to be worked exclusively in future for account of the State. The Government will fix the selling price of salt in its warehouses and will operate the maritime salt deposits. The President is authorized to impose a tax, up to 3 centavos per kilo, on foreign salt imported through Atlantic coast ports. Should the output of the maritime salt deposits be insufficient to meet the needs of domestic consumption, the Government will act as it may deem expedient.

According to the latest presidential message, during the fiscal year of 1918, 28,000,000 kilograms of salt were taken from the salt mines of Zipaquirá; 3,000,000 kilograms were sold at first class and 25,000,000 as second grade. The gross receipts were 954,000 pesos.

On March 29, 1919, the contract for the exploitation of the ocean salt deposits on the Atlantic coast, owned by the Government, was awarded at public bidding to Cortisoz, Correa & Co., of Barranquilla. According to the terms of the contract the contractors guarantee to the Government a minimum annual receipt from the product of the mines of \$400,000 gold, advancing the sums necessary for the exploitation of the mines. They also agree to advance a special loan of \$230,000 gold at 10 per cent annual interest, in sight drafts against London institutions.

THE EMERALDS.

All, or nearly all, the emeralds mined today come from Colombia and, in spite of the supposed higher value of diamonds, the emerald is the most precious of gems. Carat for carat, a flawless emerald would bring perhaps three times the price of a flawless diamond in the jewelry market. The Government of Colombia controls the exploitation of emeralds, leasing the mining districts to the working companies. The finest emeralds come from the Muzo group which has an estimated yearly output of 262,548 carats of the first class, 467,690 second class, 22,700 third class, and 1,000 fourth. The Somondoco or Chivor group, not now being worked, is supposed to have a matrix that would yield a half million dollars' worth of emeralds yearly. A new field of promise is that of the Cunicha group across the Minero River from the Muzo mines. The emerald-mining country of Colombia is not easily accessible, and the difficulties of transport force a recourse to the simplest methods in order to extract the stones. The Muzo mine is in what seems to be the bowl of an extinct volcano, and the method in use there is typical. Twenty or thirty laborers with picks and crowbars break out the face of the crater along a determined line, leaving a trail of green quartz that contain the crystals; the quartz is then cut and separated with the great-

est care, for the gems are extremely fragile when in the matrix, and the débris dropped into a sluiceway, where it is washed by a stream of water coming with force from the higher planes of the mine; the water is then drained off and the sediment searched for the green gems. The most valuable single emerald in the world was found in just this same method.

A company which was formed a short time ago to develop the emerald mines of Chirvaneque has been financed by an American firm to the extent of \$500,000.

COAL AND OIL.

Coal is found in the Cordillera, lignite on the coasts, and coking and steam coal in the interior. Recently valuable deposits have been discovered between the Atrato and Leon Rivers.

In Colombia the geologists have divided the petroleum areas into the Caribbean and the Pacific districts, with each district subdivided into smaller fields. The names indicate in a general way the locations of petroleum. The Caribbean district occupies parts of the Departments of Bolivar, Cauca, and Magdalena, and is believed to cover from 10,000 to 15,000 square miles. A very small area has been actually drilled for commercial purposes.

In the vicinity of Barranquilla one company has drilled several wells ranging in depth from 800 to 3,000 feet, and one of these shows a production of about 8 barrels of oil per day.

A short distance south of Cartagena a number of wells have also been bored, and oil has been found at the approximate depths of the wells above mentioned. A refinery has been established at Cartagena which utilizes this and other products. Another small refinery is in operation at Pamplona, which obtains the output of crude oil from the Magdalena-Santander fields. Only a small area in this field has been exploited.

On the Pacific side of Colombia, authorities say that a promising oil area exists for more than 50 miles.

According to U. S. consular reports, approximately \$3,000,000 has been spent to date in oil exploration and drilling operation in Colombia, and the cost of recent investigations is high. The natural difficulties are great; lack of transportation facilities, poor climate, broken topography, unskilled labor, and necessity of importing all tools and equipment are some of the drawbacks.

In spite of the many surface indications of the presence of petroleum throughout the coast region from Puerto Colombia to the Atrato River, drilling operations have been unsuccessful up to the present time. In the Sinu district, \$750,000 was spent by an American oil company without definite results. Other drilling work near the town of Turbaco also resulted in failure to bring in oil in paying quantities.

Judging from the opinion of experts it is believed that no good wells will be found on the flat coast country, and that future drilling operations will have to be carried on in the district farther south of Cartagena, back of the line of foothills just north of the big bend in the Cauca River. It is generally understood that the proved pet-

roleum belt runs through Colombia from northeast to the southwest, starting in Venezuela in the Lake Maracaibo region and passing diagonally through Santander del Norte and Santander del Sur in a line just north of Puerto Berrio on the Magdalena River in the Department of Antioquia. Near Puerto Berrio there exists a peculiar indication of petroleum. At certain times quite an area of the jungle is literally sprayed with crude oil which comes out of crevices and tiny mud volcanoes in small jets or streams with such force that the trees are sprayed for a considerable distance and for a height of 30 feet or more.

In 1919 there was evidence of increasing interest among American oil companies in petroleum in Colombia, and a number of exploring expeditions were sent to the country. Among these was a party for the Carib Syndicate, owners of the so-called Barco concession in Santander del Norte, near the boundary of Colombia and Venezuela. This company maintains headquarters and offices in Cartagena and has a force of expert oil engineers, geologists, and practical drillers in the country at this time. There are many rumors of petroleum indications in the Atrato and Choco River regions, samples of high-grade crude oil being brought in by natives frequently. Exploitation work in these regions would be extremely difficult on account of the climate and the jungles.

Development work accomplished to date would indicate petroleum in Colombia in large quantities and of very high grade, the average being 35° Baumé, and containing 3 per cent. of asphaltum. The analysis of cost records of actual drilling operation shows a very high cost in relation to actual depth reached, as compared with similar records from districts in the United States and Mexico.

A decree issued in 1919 modified all previous oil-land legislation and proposed changes in the oil-land laws of 1913. Oil lands have been declared the property of the nation, and requests for concessions and lands have been suspended. Thus foreign oil companies are in a rather difficult position because of the question of titles. Several large American oil companies have adopted a policy of awaiting further developments. Engineers and business agents are maintained on the ground for the purpose of obtaining information.

The President of the Republic has approved the transfer of the oil concession granted to Sr. Roberto de Mares, to the Tropical Oil Co. To secure the concession the transferee agreed to a few changes made in the original contract. The company does not acquire any real property rights by means of the transfer, to the oil wells, the soil, nor the subsoil where the wells are located, but only the right to develop them as leased lands. The governmental profit shall be 10 per cent. on the gross profit instead of 15 per cent. on the net profit. The company shall be under obligations to put up a refinery of sufficient capacity to provide for the national consumption of oil and to maintain the wells in working order, or the contract will be annulled. The company renounces the rights to unoccupied lands (1,000 hectares to each well) conceded to it in the first contract. Both the company and

the actual work will be subject to inspection by the Government in the interest of the country.

The production of oil by the Tropical Oil Co., in the Carare region Department of Santander, is 10,000 barrels a day. The company hopes to be able to produce 100,000 barrels a day in 1920.

Reports from Barranca Bermenja are to the effect that the Tropical Oil Co. has encountered an oil gusher at Infantas, near the Colorado River a branch of the Opon River. The well has been capped until the transportation situation improved to such an extent as to permit the bringing in of machinery for refining the oil and the material needed for conveying it to the Magdalena River from whence it can be placed on the market. In the meantime prospecting continues in this zone.

INDUSTRIES.

The industrial development of Colombia has been greatly handicapped by lack of transportation facilities. For a country of its area and population, the production of manufactures is almost negligible. Most of the manufactures are the product of hand work, such as the so-called Panama hats, which are made by natives. There are in Colombia about 121 factories, in which little over 12,000,000 dollars are invested. The principal manufacturing centers are Bogota, Barranquilla and Cartagena.

According to United States consular reports, the following is a list of principal industries, with the number of establishments and the capital invested:

Textiles and thread, 21 establishments, valued at \$3,530,400.—Sugar, 1, at \$2,000,000.—Oil refining, 1, at \$1,200,000.—Electric light and power, 5, at \$1,086,000.—Flour, 6, at \$780,000.—Matches, 5, at \$750,000.—Chocolate, 8, at \$515,700.—Cigars and cigarettes, 8, at \$428,000.—Cement and artificial stone, 3, at \$420,000.—Beer and ice, 5, at \$433,000.—Soap and candles, 18, at \$330,400.—Shoes, 6, at \$255,000.—Tanning extract, 1, at \$200,000.—Glass, 3, at \$150,000.—Iron foundries, 3, at \$53,000.—Carbonated beverages, 7, at \$38,200.—Distilled liquors, 1, at \$22,000.—Perfumery, 1, at \$10,000.—All others, 18, at 204,300.

Two of the plants (sugar and oil) have a capitalization of more than \$1,000,000 each; 3 textile factories and one electric plant have capitalizations of more than \$500,000 each; 10 enterprises (4 textile mills, 1 flour mill, 2 match factories, 1 cement factory, 1 chocolate factory, and 1 tanning extract plant) are capitalized at \$200,000 to \$500,000 each, 12 factories at \$100,000 to \$200,000, 15 at \$50,000 to \$100,000, 50 at \$10,000 to \$50,000, and 28 at less than \$10,000.

The city of Bogota contains 40 of these industrial plants, with a total capitalization of \$3,013,000; Medellin ranks next in importance, with 30 plants, capitalized at \$2,380,600; Barranquilla has 18 factories, capitalized at \$1,370,000, and Cartagena 12, in which \$2,993,000 is invested. There is a sugar mill at Sincerin, which is capitalized at \$2,000,000.

In August 1919, plans were completed for the establishment

of packing houses in Cartagena and other parts of the country by the Columbia Products Co.

A factory for the manufacture of sole leather has been established at Cienagas, Department of Magdalena.

One of the industries most recently established in the Department of Magdalena is the Cincinnati Coffee Co., which has imported the most modern machinery and produced 800 sacks of coffee during the last crop. The company intends to increase the area under cultivation and extend the highway to its own plantation and later to Ariguani, where it will also establish a large sugar mill.

A factory to extract sugar from coffee berries is to be started in the neighborhood of Bucaramanga. The product is richer in sugar than that extracted from cane, and will be used in making spirituous liquors.

On August 26 a stock company was formed in Manizales with a capital of \$600,000 to establish a thread and textile factory, with some 400 operatives.

LABOR CONDITIONS.

Immigration is needed, not because there is any real scarcity of labor but because foreigners will teach the people technical work. Improved sanitary conditions will come with development. When young, the average Colombian readily learns to handle machinery. The average wage paid to agricultural laborers in the Department of Bolivar is \$0.60 per day.

In 1915 the Government passed a workmen's compensation law. This new law benefits men employed in electric-light plants, street railways, waterworks, railways, breweries, distilleries, match factories, building and construction trades, mines, quarries, manufacturing plants using power, and Government work of all kinds. Employers of labor may also protect their men by taking out "blanket" policies with insurance companies.

During recent years Colombia has experienced labor strikes which have been attended with more or less violence. In recent months there were general strikes throughout the Caribbean coast. The movement was primarily due to political reasons, and also grew out of war conditions, since the shutting off of ocean traffic caused widespread lack of employment. Local disturbances occurred along the Magdalena River among railroad workers, stevedores, cargo handlers and woodchoppers. These strikes have always been settled by granting increased wages to the workers.

COMMERCE.

The foreign trade of Colombia, which was greatly disturbed at the beginning of the European war, has almost entirely recovered.

At the present time it shows a considerable balance in favor of Colombia.

TEN-YEAR TABLE OF FOREIGN TRADE.

Year	Imports	Exports	Total
1909	\$11,117,927	\$16,040,193	\$27,158,120
1910	17,383,039	17,625,152	35,008,191
1911	18,109,863	22,375,899	40,484,762
1912	23,964,623	32,221,746	56,186,369
1913	28,535,780	34,315,252	62,851,032
1914	20,979,229	32,632,884	53,612,113
1915	17,840,350	31,579,131	49,419,481
1916	28,722,525	31,654,275	60,377,800
1917	23,333,826	40,531,530	63,865,356
1918	22,034,003	37,728,559	59,762,562

The above figures are in American dollars.

The report issued by the Secretary of the Treasury concerning the foreign trade of Colombia during the year 1918, contains the following information which will give an exact idea of the general economic situation in that republic.

The exports from Colombia during 1918 amounted to \$37,728,559 in Colombian money; the imports were \$22,034,003, leaving a favorable balance of \$15,694,556, in Colombian money.

"Although the country"—the report says—"has to pay abroad the interest of the Public debt and a large number of expenses, such as commissions, insurance, freight, etc., which are not included in the figures given above, there is no question that the trade balance for 1918 was in favor of Colombia, and was the largest balance ever recorded in the history of this country. This explains the large imports of gold made in the last few months, with which the amount of money in circulation has considerably increased. In my opinion, the money in circulation has reached the amount of 40 million dollars, Colombian money."

The rough estimate of Colombian exports for 1919 gave the record breaking figure of \$60,000,000 Colombian money. The enormous increase shown is explained by the unusually price obtained for the principal products of the country.

TRADE WITH THE UNITED STATES.

The goods exported by Colombia to the United States in 1918 were as follows:

Animals, (including fowls and live poultry). \$2,523.—Art works, \$200.
 Breadstuffs, \$27,455.
 Chemicals, drugs, dyes, and medicines, \$217,638.—Cocoa, or cacao, crude, \$99,590.—Coffee, \$13,108,462.—Copper, \$542,628.—Cotton, and manufactures of, \$25,331.
 Dyewoods, in a crude state, \$8,014.
 Fibers, vegetable and textile grasses, \$23,720.—Fruits and nuts, \$2,639,402.
 Hair, unmanufactured, \$1,649.—Hats, bonnets, and hoods, composed of straw, chip, grass, palm leaf, etc., \$677,516.—Hides and skins, (except fur skins), raw or uncured, \$4,850,859.
 India rubber, gutta-percha, and substitutes for, \$661,759.—Ivory, vegetable (tagua nuts), \$317,387.
 Minerals, crude, \$17,094.
 Oils, \$3,899.
 Paraffin (not including oil), \$7,370.—Plants, trees, shrubs, and vines, \$10659.—Platinum, \$2,241,744.

Seeds, \$7,984.—Sugar, cane, \$86,856.
 Tanning materials, crude, \$1,705.—Tobacco, leaf, \$164,845.
 Vegetables, \$10,767.
 Wood, and manufactures of, \$120,673.
 Zinc, and manufactures of, \$41,656.

The American goods imported by Colombia in 1918 were as follows:

Abrasives, \$6,388.—Agricultural implements, \$82,929.—Alumina, and manufactures of, \$11,624.—Animals, \$2,138.—Art works, painting and statuary, \$4,780.—Asbestos, \$10,230.—Athletic and sporting goods, \$8,608.
 Babbit metal, \$905.—Billiard tables and accessories, \$10,725.—Blacking, (including shoe paste), \$10,324.—Brass, manufactures of, \$41,017.—Breadstuffs, \$116,242.—Brushes, \$9,927.—Buttons and parts of, \$23,264.
 Cars, automobiles, and other vehicles, \$397,704.—Celluloid, and manufactures of, \$17,467.—Cement, hydraulic, \$122,236.—Chemicals, drugs, dyes, and medicines, \$800,022.—Chewing gum, \$3,515.—Clocks and watches, \$14,855.—Coal and coke, \$44,642.—Cocoa and chocolate, prepared, etc., \$15,683.—Confectionery, \$25,809.—Copper, \$56,998.—Cork, manufactures of, \$11,443.—Cotton, \$2,468,088.
 Dental goods, \$21,401.
 Earthen, stone, and china ware, \$48,843.—Electrical machinery, appliances, and instruments, \$284,298.—Explosives, \$142,768.
 Fibers, vegetable, manufactures of, \$90,502.—Fish, \$34,542.—Flavoring extracts, \$13,004.—Fruits and nuts, \$21,937.—Furniture of metal, \$41,784.—Furs and fur skins, \$1,759.
 Glass and glassware, \$180,611.—Glue, \$7,764.—Grease, \$14,711.
 Hats, and materials for, \$23,081.—Hops, \$14,796.—Household and personal effects, \$1,140.
 India rubber, manufactures of, \$116,402.—Ink, \$13,529.—Instruments and apparatus for scientific purposes, \$14,663.—Iron and steel, \$2,422,721.
 Jewelry, \$27,466.
 Lead, \$47,908.—Leather, \$356,352.
 Malt, \$19,414.—Matches, \$1,044.—Meat and dairy products, \$154,807.—Metals, \$6,265.—Motor boats, \$19,933.—Musical instruments, \$92,789.
 Naval stores, \$93,444.—Notions, \$16,320.—Nursery stock, \$425.
 Oakum, \$9,564.—Oilcloth and linoleum, \$16,323.—Oils, \$470,772.
 Paints, pigments, colors, and varnishes, \$11,020.—Paper, \$443,259.—Paraffin and paraffin wax, \$298,420.—Pencils, (except slate) and pencil leads, \$14,026.—Pens, fountain and metallic, (except gold), \$2,326.—Perfumery, cosmetics, etc., \$33,465.—Phonographs, graphophones, etc., and records, etc., for, \$24,554.—Photographic goods, \$24,883.—Plated ware (except cutlery and jewelry), \$38,744.—Plumbago or graphite, and manufactures of, \$3,401.
 Refrigerators, \$4,230.—Roofing felt, and similar materials, \$6,115.
 Seeds, \$7,968.—Shoe findings, \$14,067.—Silk, manufactures of, \$26,747.—Soap, \$40,639.—Spices, \$10,970.—Spirits, wines, malt liquors, and other beverages, \$29,270.—Starch, \$25,297.—Stearin, vegetable, \$3,813.—Stone and manufactures of, \$8,555.—Straw and palm leaf, manufactures of, \$2,950.—Sugar and molasses, \$5,112.—Surgical appliances (not including instruments), \$16,698.
 Tobacco, and manufactures of, \$19,474.—Toys, \$22,679.—Trunks, valises, and travelling bags, \$7,259.—Type, \$6,376.—Typewriter ribbons, \$1,117.
 Umbrellas and parasols, \$13,609.
 Vegetables, \$19,026.
 Wax, and manufactures of, \$3,871.—Wood, and manufactures of, \$126,469.—Wool, and manufactures of, \$151,860.
 Zinc, and manufactures of, \$53,894.

The exportation of platinum to the United States for the fiscal year ending June 30, 1918, was 48,745 troy ounces, worth \$4,308,520. In addition to this there were exported 18,317 ounces of sheet platinum worth \$264,096.

The tobacco exports for 1918 amounted to 3,916,575 kilograms, worth \$1,004,693. This export has increased more than 300 per cent. in the past seven years. During the early years of the Republic, until 1855, tobacco was the second principal export of the country; from that date until 1879 it became the chief export 1856 being the largest exporting year the country has ever known, with a record of 5,106,023 kilograms exported and valued at \$3,092,204; from 1874 to 1875, inclusive, 7,825,520 kilograms, worth \$2,727,522, were exported. By 1879 the exportation was steadily declining, with occasional rises, but now there is a reaction and there will probably be a great future for the industry.

PROMOTING FOREIGN TRADE.

Law No. 11, promulgated August 17, 1918, provides for the establishment of a bureau of propaganda in such foreign consulates as the Government may deem expedient with the object of encouraging commerce, and especially the consumption of Colombian products. The department of agriculture and commerce will confer with the boards of trade and agricultural societies now existing in the Republic, and will co-operate with them in increasing and facilitating the exportation of Colombian products. These organizations are requested to receive, select, and transmit, or place at the disposal of the department referred to, such samples of exportable articles as they may collect for that purpose.

The National Congress passed a law encouraging the exportation of Colombian products according to which every article intended for exportation shall bear a card, wrapping paper, or tag, depending upon the shape of the package, marked "Made in Colombia," without which it will not be permitted to leave the country. Every year two medals, one of gold and the other silver, are to be awarded the exporter who has packed and presented his goods in the manner most convenient for shipment to foreign countries. The law also contains stipulations tending to foster agriculture.

The major portion of the trade of Colombia is carried on through its Caribbean ports. However, Colombia has one Pacific port, Buenaventura, which serves as the only outlet for the rich Department of El Valle. Cali is in the principal town of this section and coffee is the chief export, followed by cattle, hides, gold, and platinum. Textiles, foodstuffs (principally rice and lard), and metal products constitute the most important imports.

BRITISH COMPETITION.

British goods have been known and bought in Colombia for the last hundred years almost—certainly since 1823, when the first English house (which still exists at the port of Barranquilla), was established. For over half a century manufactures bearing British trade-marks enjoyed practically a monopoly, and it was only in 1860 that the British supremacy was challenged by

German houses. To-day, it is the North Americans rather than the Teutons who are competing with the British, especially in relation to cotton goods and other manufactures.

There is great interest in American goods of all kinds formerly imported from Europe, and more especially in textiles. Dealers complain, however, that many requests for a line of samples from New York firms are not attended to. Lines of samples should be renewed at every opportunity, as new goods are well liked and merchants are fairly up-to-date here in the textile lines.

The American products more in demand in Bogota are: Hardware, principally copper and brass articles, fittings, locks, etc.; paper products, complete lines; cotton prints—small checks and flowers; cotton knit underwear; steel products; fancy shirtings; white sheetings, in medium and inferior grades; drills and denims, in solid colors and stripes; khaki suiting cloth, both of cotton and light woolen; Palm Beach cloth for tailoring; cravenetted cloths for raincoats and light overcoats; men's haberdashery, in better medium grades; raincoats, ponchos, capes, etc., for street wear and riding in country; ladies', children's, and men's rubbers; umbrellas, better and medium grades; cotton and woolen blankets of medium and inferior grades; interior house fittings and decorations, including lighting fixtures, etc., attractive, but light, medium grades; ladies' woolen suitings of medium and better grades, dark colors with black predominating.

According to consular advices the time is very opportune for aggressive trade work in Colombia; the country was never more prosperous, and there is every indication of a steady progress in all regions for years to come.

New laws are being discussed for the better protection of commerce, and there is the atmosphere of stimulation and growth. The American influence is very strong, although there are a number of old importing houses who have long maintained trade relations with England and France and are loath to disturb old connections if possible to avoid it. However, even these houses have been obliged to seek new connections for quick deliveries of goods from the United States in order to take advantage of the present demands for merchandise, and it is the opportunity for the American exporter to cement good trade relations with the best houses in Colombia.

Packing and shipping instructions should be followed to the

TRADE REQUIREMENTS.

letter. Special packing may be charged for at reasonable rates, but the purchaser's desires should be met in every detail. Too much can not be said in this connection. The first small orders should be scrupulously attended to in every particular, the tariff requirements of the customs studied in every detail, and goods ordered very carefully selected. No substitution of goods should be permitted without express permission of the purchaser. Every effort should be made to develop the personal relation, and it should be borne in mind by the American exporter that the little things are what count the most in this trade.

American firms intending to deal with Colombia should make a careful study of the credit system now in use, which was established by European exporters and which worked very much to the advantage of the Colombian importer.

This system of credits was based upon accurate and intimate credit information secured by resident representatives.

A double purpose was served by this representation; that of actual sales of goods, and that of securing products of the country for export to Germany. One of the conditions frequently met with in the country was the lack of sufficient capital for business purposes, and the consequently high rates of interest on money locally. Through German houses large stocks of goods were furnished to Colombian merchants on easy credit terms. As a result of such terms the larger native firms were enabled to engage in a kind of private banking business of their own, loaning money at high rates of interest at from 1½ to 3 per cent. per month; an extraordinary source of profit was thus secured. At the same time these larger native houses were enabled to engage in other lines of business, such as coffee, hides, etc., for export.

Colombian merchants representing the larger houses wish to continue their relations with the United States and want present credit terms retained if such can be made universal. During the war these firms reduced credit terms to customers in the interior on all articles with the exception of cotton goods, which are still sold on long terms. However, prices and interest charges are fixed in order to take care of this branch of their business. There can be no doubt but that present terms of credit are considered ample by the larger firms, who are willing to continue on this basis if possible for them to do so.

Many arguments in favor of long credit terms are advanced by Colombian merchants. The latter require sufficient time in which to receive goods and an opportunity to move them before meeting payment. Ordinarily it takes from three to four months to receive goods from Europe and from 30 to 45 days from the United States. Long credit terms are necessary to take care of the agricultural business, which liquidates only once during the year. Coffee is the principal source of wealth of the country and the chief article of commerce. Coffee harvest and delivery dates are the dates of payment and the time for buying new stocks for the interior. The purchasing power of the bulk of the population is low; the principal source of wealth of the country is agricultural and pastoral. Transportation is slow and difficult, and all factors make for slow movement of goods and create a tendency to ask long credit terms.

According to United States trade commissioner L. P. Bell, the business men of Colombia represent a very high type, and modern methods are being rapidly adopted in that country. Steps are being taken by larger Colombian firms to make themselves better known in order to facilitate information needed for a good credit system. Failure of business firms in Colombia are very rare.

The Chamber of Commerce of Cali has adopted an agreement to inscribe on the black list of the organization the names of

business men who fail, who do not pay bills, who fail to meet obligations, etc.

The American Chamber of Commerce of Colombia at Barranquilla has now 34 active members, all citizens of the United States. On November 30, 1918, a constitution was adopted. The organization is undertaking active work, and hopes to be of real influence in advancing American interests and better relations with Colombia.

CUSTOM REGULATIONS.

The custom tariff in Colombia as in all countries deriving a large portion of their revenue from the foreign trade, are subject to continuous changes made necessary by the adjustment of the national finance to the conditions created by the war. The Colombian tariff has the peculiarity of establishing different duties for certain articles according to the port through which they are introduced. This is because Colombia has coasts on the Atlantic and the Pacific which are economically independent.

All import duties are on the basis of weight in kilos, even liquids pay on this basis. Merchandise not specified in the tariff pays at the rate of 70 cents, Colombian money, per kilo.

The list of articles admitted free of duty includes, besides goods imported for the government: Live animals, trees, coal, cement, rails and other railroad material, statues, fountains and altars made of bronze; railroad and marine engines; construction lumber, gold and silver coins, uncut gems, bricks and tiles, printing paper and natural products from Peru, Ecuador, Venezuela or any other country bound by a reciprocity agreement.

Shipments to Colombia require five consular invoices, written in Spanish. One copy is to be given to the steamship company, and four to the Colombian consul the day before the ship sails. The consul returns to the shipper one copy duly certified and signed. Three copies are transmitted by the consul to the Colombian customs officials. Each invoice must contain the name of shipper, name of vessel, names of consignee and owner of the goods, marks and number of each package, contents of each, net and gross weights, value per package, and the total f. o. b. value of the shipment. In a separate line, the total amount of freight, insurance, and commission (if any) to the port of entry. A separate invoice must be made for each mark, even if different marks represent the same consignee.

Parcel-post shipments do not require certified invoices, but they are subject to a surtax of 5 per cent. of the declared value. Merchandise for the interior must be consigned to an agent at the port of entry. Shipments must not be consigned "to order."

Bills of lading must give the name of the shipper, name of consignee at the port of entry, name of steamer, number of each package, number of packages of different kinds, gross weight in kilos, and total value of shipment. Five copies of the bill of lading, together with one copy of the consular invoice, must be presented to the steamship company the day before sailing. Two or more copies are returned by the steamship company, with the amount of freight written on them, and duly signed. One of

the signed copies is mailed to the consignee with the certified copy of the invoice.

Each package should be marked and numbered distinctly, and it is advisable to mark the weight on each package, although this is not required by law. Consular fees for certifying consular invoices are paid at the rate of 3% of total value of invoice. Consular blanks are sold at 10 cents per set of five.

The following articles are exempt of consular fee: Gold, silver, coined or in bars, not inferior to 0.900; articles ordered officially by the national government or that of the departments; articles of personal use for foreign diplomatic representatives, only when the nations they represent grant equal exemption to Colombian diplomats; plants, live animals agricultural seeds, serum and medicinal vaccine.

Colombia has consulates in the following cities of the United States: Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Cincinnati, O.; Detroit, Mich.; Los Angeles, Cal.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Newark, N. J.; Norfolk, Va.; Philadelphia, Pa.; St. Louis, Mo.; San Francisco, Cal.; San Juan, P. R.; St. Thomas, W. I.

The Colombian Congress has increased the customs duties on certain articles imported into Colombia. The duties now paid per gross kilo on these goods are as follows: Lard, 10 cents; butter and oleomargarine, 20 cents; bacon, 20 cents; rice, 4 cents; potatoes and sweet potatoes, 3 cents; barley, 4 cents; beans, lentils, etc., 4 cents; corn, 4 cents; wheat, 5 cents; onions, 5 cents; wheat flour, 10 cents; cocoa, 15 cents; cotton, 5 cents; cordage, not less than 1 or over 3 centimeters diameter, 8 cents; cordage of less than 1 centimeter in diameter, 4 cents; bags for packing, 3 cents; bags with paper lining, 1 cent.

A recent law amended the provision of a previous law exacting the payment of import duties on goods appearing on a ship's manifest but not discharged through having been short-shipped or lost or discharged at some other port. The new provision is that the importer or shipping company has six months instead of three months to deliver the missing freight, and that the captain or the agent of the ship may be released from the payment of the duties if it is proved that the vessel or other vessels of the same company have made at least three voyages between Colombia and foreign ports during the six months following the date of nondelivery. The law also provides for importation under bond of barrels and kegs to be used for packing and exporting national products, such exportation to be made within six months.

Instead of one central court of customs located at Bogota, the system is to be changed, and a board of appraisers is to be established in each port having a customhouse. These boards will decide claims of importers against classifications made by customs authorities.

CUSTOM TARIFF.

The Colombian customs tariffs are based on a fixed rate per article per kilo of gross weight. Owing to the inadequate in-

ternal communications of the country, any merchandise brought into the interior must undergo very severe handling and be subjected to many changes from railway to steamer, and from steamer to railway. It is therefore of the utmost importance that goods imported into Colombia should be packed in such a way that they will be able to stand the very rough journey inland, and, at the same time, that the packing shall be sufficiently light to avoid excessive customs duties. Bales of goods, etc., should, if possible, not exceed 90 kilos, nor should they weight less than 70 kilos.

Close attention should be given to the following: When orders are received from Colombian importers, manufacturers and shippers should insist on the Colombian clearly stating in writing the "consular declaration" of each article which will appear on the consular invoice. Heavy fines are imposed under the Colombian law for incorrect declarations.

Customs duties are specific and based on gross weight. Duties are assessed for revenue and are rather high on all manufactured articles. Traveling men's samples should be mutilated to be admitted free of duty; otherwise duty must be paid, but 75 per cent. is refunded upon reexportation of samples intact within six months. Incoming passengers are allowed 150 kilos for personal effects free of duty.

The following import duties are applicable to all foreign merchandise imported in Colombia. The amounts are expressed in Colombian pesos and unless otherwise expressed, are per kilo, in weight:

Oils and Greases.

Whale, .04.—Linseed, .05.—Olive (table), and cottonseed, and cocoanut, .10.—Olive oil (industrial), palm, turnip, etc., in barrels, .05.—Pata, .08.—Mineral oils, except for medical or lighting purposes, .03.—Lubricating oils and greases, .05.—Fish oil, .10.—Red oil, or oleic acid, .02.—Non-specified oils, .25.—Turpentine, .10.—Rosin or colophony, .01.—Pyridine, .25.—Tallow, raw, .01.—Refined tallow, .02.

Foodstuffs.

Meats and sea-food, preserved, 0.17.—Meats and sea-food, raw, smoked, salted, or dried, 0.10.—Meat extract, 0.17.—Fowl eggs, 0.05.—Fish and non-specified eggs, 0.17.—Gelatin, 0.10.—Hams, sausages, etc., 0.17.—Milk, 0.05.—Milk preparations, 0.06.—Pork's lard, 0.10.—Artificial lard, 0.35.—Butter and oleomargarine, 0.20.—Honey, 0.20.—Oysters and lobsters (alive), 0.05.—Cheese, 0.20.—Bacon, 0.20.—Rice, oats, barley, malt, non-specified cereals, corn, beans, peas of all kinds, lentils not preserved, 0.04.—Refined sugar, 0.12.—Pearl barley, 0.05.—Mushrooms, 0.17.—Potatoes and sweet potatoes, 0.03.—Canned vegetables or grains, 0.10.—Extract of malt, 0.25.—Wheat, 0.05.—Garlic, 0.04.—Caper-bush, 0.15.—Anise, 0.40.—Sassafras, 1.00.—Cinnamon, 0.25.—Onions, 0.05.—Non-specified spices, 0.15.—Rennet, 0.05.—Pickles, .17.—Mustard, 0.20.—Nutmeg, 0.20.—Pepper powder, 0.20.—Spicy sauces and extracts, 0.17.—Starch, 0.10.—Candies and dried fruits, 0.20.—Sweet pastes and flavored chewing gum, 0.25.—Edible flour, non-specified, 0.08.—Crackers, 0.17.—Flour (oat, rice, barley, corn, arrow-root, or banana), 0.07.—Wheat flour, 0.10.—Baking powder, baking cakes, 0.05.—Corn-meal, 0.07.—Ostein, 0.08.—Cattle-cakes, 0.01.—Flour pastes, 0.30.—Groats and tapioca, 0.07.—Soups, ready for use, 0.17.—Olives, 0.10.—Almonds, peanuts, pistachio, hazel-nuts, chestnuts, cocoanuts, 0.10.—Fresh fruit, 0.01.—Preserved fruits, jellies and marmalades, 0.17.—Dried fruits, non-specified, 0.20.—Cacao, 0.15.—Coffee, 0.10.—Cocoa, 0.60.—Chocolate

and chocolate candies, 0.20.—Hops, 0.05.—Tea, 0.60.—Non-specified four stuffs, 0.25.

Fuel and Lighting Articles.

Accessories for alcohol, gas and oil lamps, 0.15.—Raw wax, white, yellow, or laurel, 0.25.—Beewax, raw, black, 0.25.—Vegetable wax, 0.25.—Raw ceresin, 0.02.—Spermaceti, 0.25.—Stearine and stearic acid, 0.02.—Matches, wax, 1.00; wood, 0.60.—Raw paraffine, crude oil, and other heavy mineral oils not refined, 0.02.—Refined oil, 0.08.—Candles: white wax, 0.34; sperm, stearine or paraffine, 0.12; tallow, 0.12.—Benzine, 0.03.—Coal, 0.03.—Fuel oil, 0.01.

Animals.

Stuffed animals to be used as ornaments for hats or clothing, 1.50.—Stuffed animals for museums or collections, 0.01.—Live animals, and eggs for breeding purposes, free.

Agricultural, Mining and Industrial Articles.

Ploughs and parts of; hydraulic cranes; belts and cables for power transmission; pumps, turbines, crushing machines, piping, five centimeters of inside diameter or more; iron and steel axles; bearings, couplings, pulleys, gears, or any other parts for power transmission; evaporating tanks, boilers, and tanks of more than 50 kilos; furnaces and anvils; ant-destroying machinery, agricultural machinery and parts, or any other machinery for large industries; irrigation plants weighing over 500 kilos; machinery for drilling artesian wells; steam-boilers and engines, electric motors, and generators; hydraulic motors, turbines, gasoline, oil, and alcohol engines, wind-mills, steam rollers, iron or wood presses, 0.01.—Spades, crowbars, axes, hatchets, hammers, picks, etc., 0.02.—Tanks and boilers made of copper or any other metal, non-specified, and weighing over 50 kilos, 0.04.—Agricultural implements, non-specified, 0.05.—Furnaces, grills and iron gates for grills; elevators, operated by hand or animal force, 0.02.

Tools, Machine Tools and Implements for Trades and Professions.

Non-specified mechanical tools, 0.03.—Apparatus and machinery for scientific purposes, not specified, 0.05.—Photographic implements, 0.20.—Scales and weights up to 100 grams, 0.20; from 100 grams to 100 kilos, 0.15; from 100 to 1000 kilos, 0.10; over 1000 kilos, 0.05.—Scaphanders, 0.02.—Blowers, up to 1 meter long, 0.20; over 1 meter, 0.10.—Tools and implements for manual work, except for working gold, silver and platinum, 0.12.—Instruments and utensils for physics, meteorology, mineralogy, chemistry, etc., 0.10.—Sewing machines and accessories, 0.01.—Hair-cutting machines, 1.00.—Safety razors and blades, 1.50.—Implements for agriculture, poultry, and bee-raising, 0.01.—Watch movements, 2.00.—Household implements, non-specified, 0.05.—Clock movements, 0.50.—Measures, except when made of gold, silver or platinum, 0.20.—Boilers and motors, 0.01.—Photographic paper, 0.10.—Photographic films and plates, 0.10.—Flat irons, 0.05.—Levers, 0.15.—Stone saws, 0.02.—Dentist chairs, 0.05.—Spindles, 0.01.

Arms, Ammunition and Accessories.

Two or three edged arms, and their blades, 10.00.—Round bullets, 0.05.—Cartridges for shot gun, loaded, 0.25; unloaded, 0.35.—Cartridges for shooting galleries, 1.34.—Cartridges for revolvers or any other arms, 2.00.—Shot guns and accessories, mouth loading, 0.70; others, 1.50.—Fencing swords, stage swords and blades, 0.50.—Fulminants, 0.17.—Air pistols and guns, 1.35.—Non-specified revolvers and pistols, 10.00.—Stopper: felt and cotton, 0.30; cardboard, 0.03.

Importation of machine-guns, cannon and other artillery, arms and their ammunition, army rifles, and their ammunition, stiletos, regulation swords, explosive bullets, black-jacks, etc., is forbidden.

Varnishes, Paints, and Dyes.

Lead, white, 0.05.—Natural or artificial alizarines or anilines, enamels for chinaware, and red iron oxide, 0.03.—Prussian and ultramarine blue; minium, ochres, and liquid inks of any color, 0.05.—Indigo and non-specified vegetable dyes, and archil, 0.03.—Non-specified varnishes; oil colors either in paste or liquid, sandarach gum, lacs, smoke black, and ordinary paints, 0.10.—Cream and polish for leather, 0.17.—Roof paints, zinc white, 0.05.—Pitch, tar and rosin, solid, 0.02; liquid, 0.03.—Bronze colors, carmine, cochineal, and non-specified animal dyes; ink in powder, cakes or ribbons, pads, corks or sheets, 0.20.—Enamel, 0.20.—Dyewoods, 0.01.—Dye-wood extracts, 0.12.—Printing and lithographic ink, 0.01.—Indelible marking ink, 0.30.

Beverages.

Beer, 0.06.—Condensed beer, prohibited.—Ginger ale, 0.10.—Coca-Kola, 0.06.—Syrups, lemonades, gums, non-medicinal, 0.15.—Yeast, 0.03.—Cider and similar fermented drinks, 0.15.—Fruit juice, 0.10.—Absolute alcohol, 0.80.—Brandies, 1.00.—Essence of anise, prohibited.—Cognac and whiskey, 1.00.—Creams and pousse-café; gin; distilled liquors and rum, 1.00.—Extracts for manufacture of liquors and wines, prohibited.—Bitters, except absinthe (which is prohibited), 0.50.—Red and white wines, up to 15 per cent. alcohol, imported in barrels, kegs, demijohns or bottles, 0.05; from 15 to 20 per cent. alcohol, 0.10.—San Rafael, Bagnols and other natural wines, 0.10.—Wines containing not over 22 per cent. of alcohol, such as port, moscatel, malaga, sherry, malvasia, byrrh, vermouth, etc., in barrels, kegs, demijohns or bottles, 0.10.—Sparkling wines, containing no more than 20 per cent. alcohol, 0.20; white, 0.30.—Champagne, 0.80.—Compound medicinal wines, 0.25.—Importation of wines over 22 per cent. alcohol, is prohibited.—Alcoholic beverages not distilled and not specified, 0.25.—Table vinegar, 0.10.—Concentrated vinegar, 0.30.

Chinaware, Earthenware, Glassware, etc.

Beading, 0.75.—Mortars, 0.15.—Marine and field glasses, 0.70.—Eye glasses, 1.40; same with silver or gilt metal rims, 2.00; with gold or platinum rims, 4.00; with metal, 0.70.—Chandeliers, 0.75.—Glass and metal goods, non-specified, 0.20.—Tiles and paving stones, 0.05.—Opera and field glasses, plain, 1.40; with tortoise-shell, ivory or pearl, 2.00; with gold or silver, 3.00.—Prismatic field glasses, 2.50.—Glass marbles, 0.15.—Empty bottles for wine, Kola, or gaseous drinks, 0.01.—Glassware without metal ornaments, 0.15; with common metal, 0.25; with silver or silver plate, 0.40; with gold or platinum, 0.03.—Buttons, 0.25.—Rosaries, 0.75.—Demijohns and carafes, empty, 0.01.—Non-specified containers, 0.15.—Mirrors with tortoise-shell, ivory or pearl handle, 1.00.—Mirrors, not over 25 centimeters long, 0.17; over 25 centimeters, 0.35.—Flasks, fine quality, with metal ornaments except gold, silver or platinum, 0.25.—Flasks with marks, lettering or labels, stamped or engraved, with glass stoppers, 0.15.—Same with cork or rubber stoppers, 0.03.—Glass bottles, leather lined, 0.50.—Same with silver, 1.40.—Thermos bottles with metal of less value than nickel, 0.20; same with silver, 1.00.—Soda water containers, 0.17.—Fire extinguishers, 0.01.—Glass syringes, 0.15.—Imitation jewels and medals, 0.75.—Alcohol lamps or candlesticks, 0.15.—Glass powder, 0.01.—Chemical utensils, not graduated, 0.01; graduated, 0.15.—Telescopes, microscopes, theodolites and all similar instruments, 0.05.—Lamp tubes, 0.15.—Glasses for optical instruments and watches, 0.70.—Glass plates, bevel cut, engraved or with ornaments, with or without metal, 0.15; smooth or corrugated, transparent, or dull, 0.05.—Porcelain medals or jewels with plain metal, 0.75.—Porcelain mortars, 0.08.—Earthenware, non-specified, 0.06.—Pottery, non-specified, 0.08.—Chinaware, non-specified, 0.15.—Paving stones, 0.01.—Earthen bottles, carafes, etc., empty, 0.01.—Buttons, with or without metal, 0.20.—Gutters, pipes, 0.01.—Containers, non-specified, 0.10.—Statues and flowers, 0.60.—Filters,

0.01.—Lavatories with accessories, 0.05.—Porcelain or earthenware dolls and toys, dressed, 1.20; undressed, 0.40.—Baptismal fonts, flower pots, statues, figures and similar articles made of chinaware, majolica, porcelain or talavera, 0.20.—Same with metal, except gold, silver or platinum, 0.30.—Pipes for tobacco, opium, etc., 1.00.—Table chinaware and sick room supplies, of fine china, majolica, or talavera, 0.08.—Same goods made of white or decorated porcelain, 0.15.—Same with metal, except gold, silver or platinum, 0.20.—Chemical utensils, and earthenware tile tubes, 0.01.—Any of above articles made of china, majolica, talavera, or porcelain with gold, silver, or platinum, 10% ad-valorem.—Earthenware table sets, 0.05.—Raw alabaster and marble, 0.02.—Raw asbestos, 0.01.—Same in manufactured goods and cloth, 0.10.—Sand, argil, clay, and chalk, in natural condition, free.—Agate goods, 10% ad-valorem.—Alabaster and marble goods, non-specified, 20%.—Amber goods, 1.50.—Lava goods, 1.20.—Asphalt or pitch for paving purposes, 0.01.—Raw jet, 0.60; jet goods, 1.70.—Tiles for paving purposes, 0.02.—Earthenware for paving stones, 0.01.—Lime and Roman cement, free.—Kaolin, barium, strontium, magnesium, or lime carbonate; crucibles; earthenware, refractory or graphite furnaces or muffles; felspar; stone filters; non-specified bricks; marble powder, grinding stones, pumice stone, and lava, roofing slates, silicum, Tripoli earth, stacks-horn; chalk, 0.01.—Emerald, spar floor, grinding stones, lithographic stones, and stucco, 0.05.—Marble, alabaster and jasper goods, not destined for churches, public buildings, squares or parks, and not weighing over 10 kilos, 0.17; over 10 kilos, 0.10; monuments for public use, free; tomb stones and accessories, and bricks and paving stones, 0.03.—Marble and alabaster finished plates, 0.10.—Mica plates or mosaics, 0.02.—Mosaic art goods, 0.25.—Samples of ores, and raw or unfinished stones, 0.03.—Non-specified stones, 0.10.—Unmounted semi-precious stones, including opal, onyx, etc., 10.00.—Same goods, not classified as jewels, 2.00.—Raw mineral stones, free.—Slates, 0.10.—Graphite, 0.02.—Billiard chalk, 0.17.—Manufactured gypsum, 0.10.

Rubber, Celluloid, Gutta-percha, Tagua and Imitations.

Beading and rosaries; non-specified rubber, celluloid, gutta-percha, imitation or tagua goods; rubber shoes; hair-combs; rubber wearing apparel, 1.00.—Fans; buttons, uncovered; stamps, 1.50.—Fans with feathers or metal work, 3.00.—Rubber mats, 0.35.—Rubber accessories for machinery or automobiles; rubber cloth used in their manufacture, and rubber bands, 0.20.—Tagua buttons, 0.70.—Tagua cuff and shirt buttons, 1.20.—Raw rubber, 0.30.—Vulcanized rubber for dental work, 1.30.—Rubber bedding, 0.01.—Knives, forks, utensils and instruments with rubber, celluloid or gutta-percha handles, 0.60.—Raw gutta-percha, 0.30.—Rubber cord, 5.00.—Medals and jewelry, 2.00.—Toys and dolls, undressed, 0.60; dressed, 1.50.—Tires and tire cloth, 0.02.—Hose, 0.01.—Rubber cloth for shoes, 0.50.—Life belts, 0.10.—Rubber solution, 0.25.—Soles and heels, 0.35.—Stoppers, 0.10.—Linoleum, 0.50.—Tiles and cloth for roofing and for ships, 0.01.—Cotton rubber clothing, 0.90; same in thin cloth, for dresses and aprons, 1.10.—Woolen rubber cloth, 1.35.—Rubber sheets, 0.35.—Pipes and tubes, 0.05.

Pearl, Tortoise-shell, Coral, Horn, Ivory, and Other Animal Products and Their Imitation.

Pearl, Tortoise-shell and Coral.

Fans, 3.00.—Non-specified articles, 1.80.—Buttons, 1.20.—Cuff, collar and shirt buttons, 2.00.—Rosaries, with iron and copper, 1.35; with silver or gold, 2.00.—Raw tortoise-shell, coral and pearl, 0.50.—Knives, forks, utensils, and instruments with tortoise-shell, pearl, or imitation handles, 1.80.—Jewelry, 3.00.—Combs, 3.00.

Bone and Ivory.

Fans with silk feathers and fine metal work, 3.00.—Fans, non-specified; bone, 1.50; ivory, 3.00.—Non-specified goods, bone, 0.60; ivory, 2.00.—Cuff and shirt buttons, bone, 0.40; ivory, 2.00.—Ivory

spoons and forks, 1.80.—Table knives, forks, utensils with ivory handles, 1.80.—Same with bone handles, 0.60.—Dice, 5.00.—Calcinated bones, raw or powdered bone, free.—Raw ivory, 0.50.—Combs, bone, 0.40; ivory, 3.00.

Whalebone and Horn.

Fans with silk, feathers or fine metal work, 3.00.—Non-specified fans, 1.50.—Non-specified goods, 0.60.—Raw whalebone, 0.30.—Horn cuff and shirt buttons, 0.40.—Table knives, forks, utensils, and instruments with horn handles, 0.30.—Horn combs, 0.60.—Whalebone steels, 0.80.—Horn steels, 0.50.

Feathers.

Non-specified feather goods, 3.00.—Tooth-picks, 1.50.—Fine ostrich feathers, aigrettes, etc., 3.00.—Rooster and similar feathers, 1.50.—Feathers for pillows, 2.00.—Feather dusters, 0.20.—Feather wearing apparel, 3.00.

Leather, Furs, and Manufactures of.

Tanned leather, not otherwise specified; for shoe making and leather working, non-specified, 0.10.—Unmanufactured leather, such as kid, chamois, morocco, and in general thin leather made of goat, sheep, hide, etc., and patent leather, 0.15.—Rabbit, nutria, ermine, fox and other hides, prepared but not manufactured, 1.50; same unprepared, for industrial purposes, 0.50.—Long haired skins, such as pony, lion, etc., 1.50.—Skins, manufactured or not, for use as carpets (bear, tiger, lion, etc.), 2.00.—Leather accessories for machinery, 0.20.—Leather trimmings, 2.00.—Leather saddle parts; non-specified leather goods; saddles; manufactured skins in non-specified forms, leather leggings, 1.60.—Harnesses except collars, and leather cords, 1.00.—Razor-straps; trunks and valises; non-specified foot-wear; leather cut for shoes or slippers; whips with metal, wood, bone, horn, or cheap metal handle, not silver-plated or gilt, 1.50.—One piece beltings for transmission purposes, 0.01.—Men, women and children's shoes and boots, 1.36.—Cigarette cases and purses, 2.50.—Harness collars, 0.50.—Fur stoles and muffs, 2.00.—Gloves, 4.00.—Whips with handle of ivory, pearl, tortoise-shell or plated metal; hand-bags, wearing apparel, headwear, etc., 2.00.

Drugs, Medicines, Chemical and Industrial Products.

Fertilizers, provided that in the invoice the composition and destination are stated, free.—Aniline oil; cod-fish oil; magnesite and non-specified salts of; cuadilla; chemical products used in industries, imported not over 100 kilos at once; special spoons and jugs to feed invalids; metal funnels; poisonous substances for preparation of hides; spatulas; pill making machines; rubber stoppers for medicines and dentist drilling machines, 0.10.—Chalmugra oil; acetate of soda; mureatic and sulphuric acid; liquid air; sulphuric anhydride; antimony and carbon sulphide; bichromate of potassium; borax; nitrate of lime; carbonate of soda, potassium and varium; soda and potash ashes; cyanide of potassium or sodium; unrefined chlorhydrates, phosphates, nitrates and sulphates of ammonium or potassium; liquid chloride, zinc chloride, creoline; cresyl, Mac-Dougall remedy and similar substances; zumaque; kainite; quicksilver; naphthol, nitrate of soda and potassium; sulphate of iron; oxide of magnesium; quinine and its salts; bitter wood; caustic soda; serums for prevention and treatment of contagious diseases; sulphate of copper or iron; sodium sulphide; thymol; crysallic ointment; vaccine virus; assay outfits; porcelain capsules; boxes for packing; Pasteur filters; iron motors, 0.01.—Almond, castor and nut oils; non-specified medicinal essential oils; picric and non-specified acids; distilled waters, non-alcoholic, with or without perfume; medicinal alcoholic extracts, non-specified; non-perfumed alcoholic extracts; non-specified tar preparations; asafoetida; glucose and milk sugar; sugar candy; barium and its salts; bay-rum;

benzo-naphthol; empty capsules; castoria; cardamomum; medicinal cigarettes; refined chlorhydrates, phosphates, nitrates and sulphates of ammonium and potassium; cobalt and its salts; non-specified barks; chromium and its non-specified salts; diastase; non-specified medicines, chemical and industrial products; plasters and similar articles; strontium and its salts, ethers; medicinal extracts; phenacetine; dry flowers; red or white phosphorous; non-specified gums and rosins; glucine and salts; non-specified medicinal greases; reduced iron and non-specified salts; medicinal injections, exempting serums, vaccines or separate products; non-perfumed medicinal soaps; non-patented medicinal syrups; non-patented medicinal liniments; medicines in the form of tablets, pastilles, granules, capsules, etc., excepting specialties; all new products of known composition, with an abbreviated or changed name; mercurial salts and preparations; medicinal nuts; oxide and salts of uranium; fumigating papers; medicinal powders from leaves, roots, barks, or any other origin, plain or compound; medicinal opium; chloride of tin; medicinal dry fruits; saccharine; salts for preparation of mineral waters; bismuth salts; sulphate of nickel; dry stems; medicinal tinctures; medicinal wines, non-patented and non-specified; iodoform; iodol; iodine; hypodermic needles; surgical needles; assaying stills, not over 5 liters capacity; apparatus for the production of oxygen; orthopedic apparatus; apparatus for injection of artificial serums; X-ray outfits; soda water producing apparatus; aspiration pumps; surgical knives; medicinal bags and pocket-books; trusses; syringe canulas; rubber capsules; chloroform masks; catgut; rubber for surgical uses; baby rings; glass or rubber cups for medicinal purposes; ear-drums; nipples; surgical mirrors; stethoscopes; surgical cases; abdominal belts; friction bands; cloth filters; forceps; medicinal gauzes; surgical gloves; veterinary instruments, non-specified; bromine salts; non-specified surgical instruments, optical, chemical and bacteriological instruments; fountain syringes; tin syringes; hypodermic syringes; medical syringes; electro-medical outfits; elastic stockings and bands; ophthalmoscopes; artificial eyes; pessaries; brushes for medical purposes; dental instruments; atomizers; silk thread; speculums; sounds; suspensories; thermometers; thermocauteries; antipyrine; rubber tubes for fountain syringes; bandages; nitrate of silver; medicinal seeds; non-patented ointments, 0.25.—Essential oils, natural or synthetic, such as are used in perfume, 5.00.—Non-specified lead salts; acetic, arsenic, boracic, butyric, carbonic, chromic, carbolic, formic, lactic, nitric, oxalic, citric, tartaric and sulphurous acids; liquid tar; metallic arsenic; sulphur; bicarbonate of soda and potash; charcoal; chlorate of potassium; gambia; dye-wood extracts; permanganates of lime, soda, potash and zinc, etc.; sodium peroxide; persulphates of lime, soda and potash; non-essential salts of sodium and potassium; sulphate of aluminum; sulphate of soda; 0.03.—Fluorhydric, pyroligneous acid; methyllic alcohol; quasia; bacteriological cultures; phenate of soda, liquid; formol; lye, concentrated; litharge; silicate; santolin; outfits for preparation of soda water in large quantities; sterilizing stoves; barometers and other meteorological instruments; lead stoppers for bottles; apparatus for sterilization of milk; calcium carbide; bacteriological stoves; paper filters; microscopes; collodion, 0.05.—Natural mineral waters; alum; ammonia; animal carbon; disinfecting chlorides; hydrosulphite of soda; hyposulphite of soda; perbromate of soda; caustic potash; cinchona bark or powder; sulphites of soda, potassium or lime; sulpholein; alkaloids in natural state, discs or solutions; musk; artificial sponges; secret and patent medicines; 1.00.—Ammonium carbonate; cream of tartar; glycerine; aerometers and similar instruments; enamel, iron and paper capsules; eye cups; disinfecting trays for surgical instruments; glass funnels; enamelled iron syringe fountains; glass fitting bottles; measuring glasses, graded or not; 0.15.—Secret medicines or specialties (not patent), 2.00.—Pharmaceutical preparations that can be prepared without legal restriction and not in special container; 0.40.—Non-specified silver medicinal preparations, 0.50.—Vanilla, beans, 0.60.—Common vaseline, creoline and similar substances; thermos bottles; druggist scales and weights, 0.20.—Perfumed vaseline, 0.30.—Refractory small furnaces; cork stoppers, 0.08.—Pill making outfits for druggists, 0.35.

Electrical Goods.

Porcelain composition, slate, wood or metal accessories with or without metal; meters; steel lamps or any other outside lighting lamps; telephonic and telegraphic apparatus; cylinders or bars of carbon or zinc; rubber or any other insulating material non-specified; electrical batteries and plates for storage batteries; porcelain, wood, glass or lead vases for batteries; non-specified; non-specified accessories and apparatus; 0.04.—Glass, porcelain and china insulators; non-specified metallic cords and protected metallic cables; dynamo motors, transformers and rheostats; 0.01.—Rubber or any other non-specified insulators, 0.03.—Chandeliers, table and wall lamps or any other ornamental lamps; electro-medical machines and batteries, 0.25.—Incandescent light globes; electric fans, 0.05.—Shades and reflectors made of iron, glass, or porcelain, 0.10.—Wire fuses, 0.20.—Non-specified materials, 0.08.

Explosives and Inflammable Materials.

Gun-cotton; dynamite; fulminants, fuses, and grain powder for mining, 0.01.—Hunting powder, black, 0.30; white, 0.45.

Musical Instruments.

Accordeons; octave flutes; violin and violas; harmoniums; phonographs and graphophones; music rolls for pianos and player pianos; oboe, titulo; 0.10.—Baritones; saxophones; guitars and similar instruments; wood instruments; bassos; 0.40.—Music boxes, drums, 0.60.—Clarinets; flutes; double-beat drums; cellos; 0.80.—Copper bassos, 0.35.—Cornets; lutes; non-specified metal instruments; cymbals; 0.50.—Phonograph discs, 0.05.—Music grinders, 0.25.—Organs, 0.17.—Pianos, pianolas, and player-pianos, 0.07.

Transportation.

Aeroplanes; dirigibles; hydroplanes; hydro-aeroplanes and similar machines; ships; cars for railroads, street cars or aerial transportation; locomotives, electrical or steam engines and accessories used in operation of aerial cables; rails; railroad ties; free.—Non-specified transportation apparatus; wagons and carts with or without springs; passenger railroad cars; rubber tires; springs for cars; automobile, wagon or car wheels; 0.02.—Automobiles either passenger or freight, with or without tires, 0.01.—Baby carriages, invalid carriages and chairs; bicycles and tricycles, with or without motor; 0.05.

Wood and Manufactures.

Fans; umbrella frames with wood handles; billiard cues; 0.50.—Fans for advertising purposes; carriage accessories; polished wood; tool handles, 0.02.—Fans with parts of palm or leaves; trunks; statuettes; toys; unlined boxes or cases; common furniture, 0.20.—Altars, 0.15.—Sporting goods; railings; cork plates; faucets and stoppers; Veneers; unfinished wood matches; doors and windows; shoe-heels; rat traps; 0.05.—Ship masts, free.—Umbrella frames with handle of tortoise-shell, pearl, ivory or plated metal; canes with ivory, tortoise-shell, pearl or plated metal handle; 1.50.—Glove stretchers, .60.—Umbrella frames and canes, with handle made of bone, composition, horn or non-plated metal; non-specified manufactured articles with silk cloth or leather; furniture with silk or leather upholstery; smoking pipes, 1.00.—Non-specified manufactured articles, 0.25.—Wood trays; wood wash-stands; non-specified cork; saddle frames; shoe lasts and measures; bowling, lawn tennis, cricket, baseball, ping-pong, golf, croquet and football supplies; common pencils; lined shoe heels; 0.10.—Barrels; tanks; cork powder; portable buildings; lumber; wood-pulp; oats; 0.01.—Billiard accessories; screens, 2.00.—Rosaries; furniture with mirrors; marble covers or gilded, upholstered with duck, wool, or horse-hair etc.; combs; 0.40.—Boxes, 0.04.—Furniture made of cabinet wood or with cabinet wood veneer, not upholstered; pointed knives with leather, bone, or horn handle and not over ten inches, 0.30.—Wood stoppers; sawdust, 0.03.

Metals.

Steel, Iron, and Manufactures.

Button hooks; shoe horns; combs; pens; strings for musical instruments; non-plated cigars, cigarettes, match-cases and similar articles; toys; 0.60.—Furniture accessories, not plated; saddle and shoe accessories non-specified and not plated; uncovered rings; trays; cutting tools with wood handles; buckles; non-specified tools except agricultural and mining; pruning scissors; 0.12.—Same goods nickel-plated; tableware; knives with narrow blade not specially designed, for agricultural work; tailor buckles; 0.25.—Railroad track accessories non-specified; non-specified machinery, accessories and parts; car and carriage accessories; steel bars and plates; chains with links over one centimeter interior diameter; non-specified containers; tinplate; iron and steel tires; piles for sugar mills; bath-tubs; 0.02.—Sewing needles; pins and hair pins; tin and iron toys; pocket knives not exceeding in value one peso per kilo; 0.40. Pocket knives exceeding in value one peso per kilo should pay 0.40 for the first kilo and 0.60 on the excess.—Oil cans; stencils; nickel plated or lined rings for shoes or saddles; non-specified wire goods; non-specified tin goods; enameled or galvanized trays; portable trays; nickel-plated or covered bottles; iron furniture with or without parts of wood; horse combs; burners; posts for fencing; 0.17.—Packing needles; tailored or saddled buttons; 0.35.—Steel wire for musical strings, covered or not; women's dress buttons; nickel plated spurs, bridles, stirrups, etc.; flower pots, vases, etc.; medals and crosses; powder boxes; 0.50.—Phonograph needles, 0.04.—Non-galvanized iron wire for manufacture of nails; common wire; barbed wire; anchors; unmanufactured iron and steel bars; wire cables; telephone, telegraph, etc., poles; crucibles; buildings; filters; galvanized or painted iron plates, plain or corrugated; wrought iron and steel in bars, plates or any other form; lightning rods; bridges for private use; oars; 0.01.—Hat pins, without precious metal; twisted cord for trimmings; disinfecting apparatus; fire engines and accessories; buoys; statues, fountains and gates and fences for public places; light houses and towers for same; pig iron; iron ore; free.—Nickel plated iron or steel articles; cigar cutters; clock frames; non-specified iron and steel articles; enameled advertising goods; varnished or painted trays; shower baths; candle-sticks; 0.20.—Kitchen utensils, 0.15.—Chains with links not over one centimeter inside diameter; tin-plates, stamped, lacked or painted; kitchen mechanical utensils weighing less than ten kilos; 0.03.—Empty tin cases; operating tables; iron nails with copper or nickel heads; insect and rat traps; 0.10.—Paddlocks; bells and rattles; locks and keys; portable boxes; can openers; thimbles; non-plated spurs, bridles, stirrups and muzzles; basket and bird cases; key rings; picture frames; fencing masks; furniture with mirrors or marble parts; 0.34.—Nails and tacks; small furnaces and kitchens; safes; knives and cutting instruments over seventeen inches long, for agricultural purposes; toilet articles; kitchen utensils weighing not over ten kilos; non-specified building material; gates and fountains for private uses; pulleys, poles, jacks, etc.; frying pans; shoe-maker's tacks; pots; iron screen over three millimeters space between threads; pipes and piping; 0.05.—Duck colors; safety razor blades or gilded flower pots; 1.35.—Non-specified scissors with value not over one peso per kilo, 0.40; whenever value exceeds one peso per kilo the duty on excess is 60%.—Wire screen with less than three millimeters between thread, 0.08.

Copper, Bronze, Brass, etc.

Wire; disinfecting and fire apparatus and accessories; copper cables; 0.01.—Bars, plates or discs, 0.04.—Bearings, 0.05.—Solder, 0.10.—Unmanufactured rods, 0.06.—Statues, fountains, gates and fences for private use, 0.15.—Nails, tacks, screws and rivets; boilers and tanks weighing from ten to fifty kilos; pipes and accessories; wire screen over 3 m.m. between threads; 0.20.—Building accessories weighing over one-half kilo, and not plated; stoves weighing over one-half kilo; faucets and stoppers; furniture 0.25.—Alcohol

oil and acetylene; 0.30.—Accessories for buildings weighing less than one-half kilo; same nickel plated over 10 kilos; saddlery and shoe-making accessories; kitchen utensils; stoves weighing less than one-half kilo; tanks and cans weighing up to 10 kilos; 0.35.—Baskets and bird cages, 0.40.—Nickel plated building hardware weighing less than one-half kilo; nickel plated saddlery and shoe-making accessories; 0.45.—Stills; non-specified and non-plated manufactured articles; copper chains; portable boxes; thimbles; stirrups; picture frames; stove burners, non-plated; non-plated locks and keys; 0.50.—Pins; musical strings; cigars, cigarettes and match cases and similar articles not plated; toys; 0.60.—Nickel plated locks, keys, stove burners; 0.65.—Button-hooks and shoe-horns; non-plated art art bronzes; nickel plated cigar, cigarette, match cases, and similar articles, 0.80.—Twisted cord for embroidered purposes, 1.00.—Medals and crosses used as pendants; 1.20.—Hair-pins without gold, silver or platinum parts; 1.30.—Silver plated articles, non-specified; art goods gilded or silver plated; 1.36.—Gilded articles, non-specified, 1.40.—Dog collars; gilded or silver plated building; jewelry including cuff, collar and shirt buttons, and studs; 2.00.—Statues, fountains and gates for public use; copper ore; free.

Aluminum, aluminous Steel, Aluminous Bronze and Tin.
Non-specified articles; tin and lead solder; 0.05.—Kitchen utensils; bottle caps; non-specified containers; aluminum or tin sheets, paper and powder; statues for private use; stoves and burners; 0.20.—Building hardware and accessories for furniture, shoemaking, saddlemaking supplies; table ware; 0.50.—Stirrups, 0.70.—Non-specified articles, cigar, cigarette and match cases; powder boxes; cofers and similar articles; toys; picture frames; 0.80.—Thimbles, 1.00.—Beadings, 1.30.—Medals and crosses used as pendants; art goods, non-specified; 1.50.—Jewelry, including buttons and studs; 2.00.

Nickel.

Nickel bars or plates, 0.10.—Nickel goods pay 50% more than aluminum goods.

Gold and Platinum.

Jewelry with or without precious stones; 10% ad-valorem.—Crucibles, capsules, plates, pinchers, steels, refrigerating boxes, wire and all articles used exclusively in industry and chemistry; 0.05.—Surgical instruments and platinum needles for pyro engraving; 0.25.—Eye-glasses and rims, 4.00.—Gold sheets and sponges for gilding and dental purposes; 5.00.—Embroideries and embroidered articles, 6.00.—Pen and pencil holders, 7.00.—Threads and beading, 10.00.—Gold and platinum bars, bouillon, powder and ore; free.—Non-specified articles, 10% ad-valorem.

Silver.

Eye-glasses and rims; silver for dental purposes; 2.00.—Non-specified articles; gilded articles except jewelry; embroideries and embroidered articles; thread and beading; medals; 3.00.—Silver sheet for plating purposes, 1.00.—Pen and pencil holders, 4.00.—Silver ore and bars, free.—Jewelry and jewels with or without gems, gilded or not; 10% ad-valorem.

Lead and Zinc.

Lead and antimony alloys in bars; zinc bars, rods, or pig; roofing plates and tiles; tubes and gutters, 0.01.—Parts for fountains and gardens; printing type, 0.02.—Bath tubs and tanks; pipings; 0.03.—Bottle-caps; non-specified building materials; lead and tin solder; 0.05.—Lead and zinc sheet; 0.10.—Non-specified articles made of lead or zinc or tin alloy; toys; 0.40.—Statues for public monuments; zinc and lead ore; free.

Various Metals.

Quicksilver; pure manganese and by-products; sodium amalgam; 0.02.—Antimony in bars or in lead or zinc alloys; 0.03.—Metallic bis-

muth; cadmium; calcium; magnesium; non-specified metals; potassium; pure sodium; 0.25.—White metal articles, non-specified; articles made of non-specified alloys, except those containing gold, silver or platinum; white metal tableware; 0.80.—Medals and similar articles, non-specified, 1.00.—Non-specified silver plated articles, 1.30.—Metallic wire non-specified, 1.35.—Silverware, solid or silverplated, all of the same material; 1.36.—Gilded articles, non-specified; silver-plated articles, non-specified, 1.50.—Silverware with tortoise-shell, ivory or pearl handle, 1.80.—Non-specified jewelry without gems and without silver, gold, or platinum, 2.00.

Paper, Cardboards, Books and Stationery.

Alphabets for educational purposes; hanging calendars; cardboard spheres; school maps; stumps; slate pencils; non-specified printed books; maps; drawing models; penmanship models; non-specified school material; roofing; atlases; 0.01.—Almanacs in book form; advertising matter; brown and wax paper; 0.02.—Non-specified cardboard; bookbinder's cardboard; paper bags; pulp for the manufacture of paper and cardboard; 0.03.—Rulers for drawing purposes; slates; 0.03.—Stamp pads; paper tapes or ribbons; calculating machines; lanterns; slate pencil holders; typewriters; sand paper; cigarette paper; bookbinder's paper; filtered paper; cloth paper; 0.05.—Devices for reproducing manuscripts; cardboard for cards; albuminated paper; blueprint paper; lithmus paper; blotting paper; copying presses; chalk; 0.10.—Plain cards, 0.12.—Albums; paper or cardboard bound; non-specified articles made of paper or cardboard; color boxes; lip glue; mucilage, liquid; rubber erasers; paper weights; glass pen-holders; porcelain, glass, etc., inkstands; 0.15.—Cardboard boxes; printing cuts; hand printing outfits; sealing wax; pencils; wire stitching machines; check protectors; numbering machines; stationery paper; rubber and waterproof paper for copying presses; drawing paper; non-specified paper; tracing paper; woodencil and pen holders with metal except gold, silver or platinum; filing boxes; cabinet wood rulers with or without metal; paper holders; metal stamps and seals; envelopes not printed or engraved; pencil sharpeners; cards, not printed; blackboard cloth; pocket and travelling inkstands; 0.17.—Typewriter ribbons; letter copying books; music sheets and books; carbon paper; wall paper; copying paper; wire paper holders; printed or lithographed paper for cigar and cigarette packages; disc blotters with wood or metal frame; date stamps; printed postal cards; eye shades; 0.20.—Writing paper in boxes; paper weights; printed envelopes; art inkstands without gold, silver or platinum; non-specified stationery articles, 0.25.—Printed labels; letter-heads, 0.30.—Blank books; velvet, silk, gold and silver wall paper; decalcomania paper; 0.34.—Photographs and prints; printed pictures; 0.35.—Printing paper, white or colored, in sheets, not less than 60X90 centimeters and with original price over 15.00 per 100 kilos; 0.30.—Desk blotters and cardboard files not covered with leather; printed or lithographed blanks, 0.40.—Cloth bound albums with no silk; postage scales; tickets; metal fasteners and clips; pen knives with bone or wood handles; foreign postage stamps; 0.50.—Steel and plain metal pens; gilded cards with cloth ornaments; 0.60.—Pencil and pen holders of plain metal, guttapercha, rubber, or celluloid, without parts of fine metal; 0.70.—Leather covered desk blotters and files; paper cardboard masks; iron, copper or bronze paper weights or of any other fine material; leather, guttapercha or nickel plated inkstands; 1.00.—Albums, bound with leather or wood 1.35; bound with Russian leather, tortoise-shell, hard rubber, celluloid, horn, guttapercha, ivory, pearl, velvet or silk with or without metal except gold, silver or platinum; printed books with same binding; blank books with same binding; 1.50.—Letter openers with handle made of tortoise-shell, ivory or pearl; 1.80.—Pencil and pen holders with parts of silver; seals and stamps with ivory, pearl, tortoise-shell or fine metal handle; 2.00.—Albums with fine leather or any other fine material and with gold, silver or platinum ornaments; books with same ornaments; paper weights with same ornaments; blotters with gold, silver or platinum ornaments; inkstands with parts of gold, silver, or platinum; 2.50.—Lottery and

raffle tickets; playing cards; 3.00.—Pencil and pen holders, with parts of gold or platinum; 4.00.—Gold or any other fine metal pens; 7.00.—Catalogues; periodicals and printed sheets, non-specified; printing paper in sheets no less than 60X90 centimeters and with original price not over 50.00 per 100 kilos; toilet paper; free.—The importation of erasing liquids is prohibited.

Perfumery and Soap.

Essence of citronella and mirbano; 0.05.—Plain soap without perfume; oil or rosin soap, 0.10.—Toilet soap without perfume or very slightly perfumed, 0.15.—Tooth powder, water or extracts; non-medicinal; fine perfumed soaps, 0.80.—Perfumed or toilet waters, 0.50.—Perfumed shampooing preparations, 1.00.—Sachets; cologne water; perfumed granules and pastilles, perfumed face and toilet powder and powder puffs; 1.50.—Non-specified perfumed oils; brillantines; cosmetics, creams for hair, skin or nails; perfumes; non-specified perfumery articles; perfumed pomades; 2.00.

Plants and Seeds.

Dry fodders; 0.01.—Dry plants not to be used directly as food or medicine; 0.03.—Bird seed and linseed; 0.05.—Plant collections not used directly as food or medicine; moss and natural fresh flowers; living plants; seed for agriculture in amounts up to 100 kilos of each kind, non-specified; free.

Dry Goods.

Cotton and Manufactures.

Raw cotton, 0.05.—Bags or fabric for manufacture of bags; cotton hose; 0.03.—Cables and cords, over three centimeters in diameter; raw linen and other similar fibers; 0.03.—Waste cotton; cords and cables from one to three centimeters in diameter; unbleached yarn for textile manufacturing machines; 0.05.—Bleached yarn; plain water-proof black cloth for packing purposes; 0.08.—Combed cotton in plates; colored yarn; bookbinder's cloth; water-proof bags for packing purposes; nankin; 0.10.—Cords, less than one centimeter in diameter; 0.18.—Cords for bridles, nets or harnesses; prepared cloth for oil painting; wicks for lamps, candles, matches, etc., carpets, rugs, or carpet cloth; 0.20.—Duck, unbleached, 0.25.—Thread; darning cotton; 0.30.—Painted bags for packing; prepared fuse; 0.35.—White duck for shoes and clothing; blankets; 0.40.—Colored duck, plain or striped; anjou cloth; women and children untrimmed hats; flannel; crinoline, white or colored; striped drills and dennins; hat forms; India cloth; linoleum; elastic cloth for shoes; white and plain cloth like calico, etc.; filter cloth; 0.50.—Cloth covered buttons; umbrellas; 0.60.—Drills, white or colored shirting and mattress drill; 0.55.—Tartan, unbleached, white or colored; white and colored fabrics, plain, stamped, dyed, in stripes, plaids, such as are generally used for men and women's clothes, for men's shirts, for linings of suits, for curtains, tablecloths and furniture, provided that they are not specified under any other classification; 0.63.—Shawls, with or without wool or cotton fringe; unbleached or white knitted goods in pieces; 0.65.—Non-specified, unbleached fabrics without any colors and absolutely plain; 0.34.—Bags with paper lining, 0.01.—Girths and cinches; cords and bands for furniture; rubber cloth goods, non-specified; blankets; color knitted fabrics in pieces; towels; 0.70.—Ribbons, brocaded; bed covers; shoe-laces; corset laces; non-specified cord; shoe tapes; umbrella covers; narrow ribbon; sheets without embroidery or ornament; 0.80.—Handkerchiefs, not embroidered, in pieces; 0.85.—Underwear; pictures, on cloth, printed, cut, or in pieces; hemp or any other fibre sandals; knitted shirts; curtains without lace or trimmings; tape, elastic or not, for belts, bands garters or suspenders; tablecloths and napkins, hemmed, or not; cut handkerchiefs, hemmed or not; rubber cloth blankets; rubber clothing; socks, stockings and caps; 1.00.—Sandals with leather soles; trousers, non-specified; table covers, plain or trimmed; belts;

collars and cuffs without embroidery, lace or other trimmings; hammocks; garters; sheets with embroideries or trimmings; embroidered or needle-worked fabrics; suspenders; 1.20.—Corsets; cotton, velvet or plush; men's ready-made suits and parts of; 1.80.—Knitted dresses, frocks and gowns, non-specified, without laces, embroideries or silk; 1.40.—Overcoats, wraps and shawls without embroideries and laces; men's caps; cotton shoes with rubber or leather soles; cloth curtains with trimmings; quilts; pillow-cases; embroidered handkerchiefs with monograms or ciphers; bridles; lingerie without embroideries, needle-work or lace; hats; cotton and silk fabric, having not over 25% silk; gallons for furniture or curtains, non-specified; neck-ties; 1.50.—Men's shirts, 1.60.—Women's clothes of non-specified fabric without lace, embroidery, needle-work or silk; 1.70.—Trimmings for clothing; laces; non-specified pessamentaries; 1.80.—Overcoats, wraps and shawls with embroidery or lace; table covers, bed covers, curtains and all other articles made of crochet or lace, voile or any other similar fabric; artificial flowers; pillow cases with embroidery or lace; shirt fronts with embroidery or lace; women's clothes with embroidery, needle-work, lace or silk; hats with silk ribbons or trimmings, flowers or feathers; 2.00.—Lingerie with embroidery, needle-work, laces or silk; 2.20.—Layettees with or without silk ribbons or laces; collars and cuffs with embroidery, needle-work or lace; non-specified lace or voile goods; gloves; embroidery and lace with or without wool or silk; 2.50.—Women's clothes made of lace or voile, embroidered with needlework and with or without trimmings; women's clothes made of cotton and silk fabric, provided it has not over 25% of silk; 3.00.

Horse-hair and Similar Materials.

Manufactures of horse-hair alone or as predominating material; 0.50.—Brushes, used in arts and industries; 0.15.—Raw horse-hair, 0.25.—Non-specified articles made of wood or iron and horse or any other animal hair; 0.30.—Horse-hair cloth, for dressmakers, 0.35.—Horse brushes and brushes used in washing floors, shoe polishing, in mines or factories; 0.40.—Tooth and nail brushes; horse hair cloth used in furniture; 0.70.—Shaving brushes; clothes brush and toilet-set brushes without ivory, tortoise-shell, pearl or fine metals; 1.00.—Cloth, hair and face brushes with ivory, pearl, tortoise-shell or fine metal; 2.00.—Human hair and imitation, raw or unmanufactured; 5.00.

Hemp, Sisal, Jute and Similar Fiber Goods.

Sisal, hemp, jute, etc., raw; yarn; 0.03.—Cloth for manufacture of bags or packing; bottle covers; tow; straw used in manufacture of furniture, mattings and hats; packing bags, tarred or not; 0.01.—Linoleum; cables or cords, over three centimeters in diameter; reed; straw; palm or straw, unmanufactured; 0.02.—Cords from one to three centimeters in diameter; brooms; 0.05.—Cord, less than one centimeter in diameter; 0.15.—Willow baskets for packing purposes; 0.17.—Rugs and carpets, and fabric for their manufacture; straw or willow baskets; mats; furniture; 0.20.—Hat frames and crowns; non-specified articles; 0.50.—Straw hats and caps, unfinished and untrimmed; 0.95.—Hats, including panamas and caps, straw, with ribbon or leather trimmings and buttons; 1.00.—Women's hats trimmed without laces, silk, or fine feathers; 1.50.—Women's hats trimmed with gauze, silk, flowers, or fine feathers, etc.; 2.00.

Wool.

Waste; fleece; 0.03.—Combed wool; 0.05.—Yarn for spindles or any other textile manufacturing apparatus; 0.10.—Thick felt, not used in clothes; 0.30.—Blankets, 0.50.—Embroidered thread, 0.70. Balze. 0.75.—Flannel unbleached, white or colored; 0.80.—Hat crowns of wool, beaver or felt; shoe laces; tapes or cingles for furniture; fabrics with weft on a wrap of cotton, hemp, linen or any other similar fibre without wool or silk; wool covered buttons; 1.00.—Rugs and carpets, and material for their manufacture;

0.85.—Felt clothing; umbrellas; 1.20.—Fringes; fabrics with or without cotton and stripes, plaids or silk threads; handkerchiefs; wool, felt, or beaver hats without silk, laces or fine feathers; rubber cloth, non-specified; tapes and ribbons for belts, garters or suspenders; 1.50.—Slippers; knitted underwear; table covers and bed covers with embroideries and silk trimmings; belts; cord; corset, with or without small silk trimmings; curtains without silk; umbrella covers; garters; ready-made clothes for men, women or children with linings or trimmings not of wool or silk; rubber-cloth covers; suspenders; 1.60.—Clothing material, plain or worsted, for women, with or without slight stripes or threads of silk; material for table or bed covers and furniture; 1.30.—Shawls without silk fringe, 1.40.—Rubber coats and clothes, 1.80.—Non-specified knitted goods with or without small silk or metal trimmings; tassels; mufflers and shawls; wool, felt, or beaver hats; knitted shirts with or without silk laces or trimmings; table and bed covers with silk embroideries, trimmings or laces; neck-ties; quilts without embroideries, laces or silk; horse blankets; knitted gloves; mantles without silk lace; passementeries, non-specified; shawls; ready-made clothes, made of material with or without lining or trimming not of silk, and without laces or embroideries; 2.00.—Curtains, quilts and cushions; mantles; shawls and ready-made clothes with embroideries, laces, or trimmings of silk; cloth material with stripes, plaids or patterns made of silk but not covering more than 25% of the surface; 2.50.—Wool, felt and beaver hats with laces or fine feathers; 2.10.—Ready-made clothes of wool material with stripes, plaids, or patterns of silk not exceeding 25% of the total surface; non-specified ready-made clothes; 3.00.

Linen.

Cords and cables, three centimetres or over in diameter; 0.02.—Raw linen, 0.03.—Cords, one to three centimeters in diameter; 0.05.—Hose; tarred cloth; tow; 0.01.—Yarn, not colored, for manufacture of textiles; rubber cloth bags; 0.10.—Varnished or black rubber cloth, plain for packing purposes, 0.08.—Colored yarn for manufacture of textiles, 0.13.—Cord, less than one centimeter in diameter; linoleum; 0.15.—Canvas, prepared for oil-painting; fishing nets; 0.20.—Rugs and carpets, 0.25.—Sewing thread; embroidering thread; unbleached or bleached fabrics, non-specified; 0.35.—Rubber cloth for table covers, furniture, saddlery, or shoemaking; 0.40.—Crochet and darning thread; non-specified material in colors with stripes or plaids; 0.45.—Filter cloth for industrial purposes, 0.50.—Crinoline; unbleached drills; elastics for shoes; 0.55.—Anjou cloth; women and children hat frames; 0.60.—Cloth covered buttons; rubber cloth manufactures, non-specified; knitted fabrics, in pieces, 0.70.—Cingles and material for them; shawls with fringe, not of silk; umbrellas and parasols; blankets; unbleached fine fabrics, plain or worsted, generally used in women's clothes; colored knitted goods in pieces; towels; 0.80.—Shoe laces; non-specified strings; plain white fabrics without pattern, used generally in manufacture of lingerie or sheets; 0.90.—Knitted underwear; ribbons; galloon; non-specified bed covers; white and colored drills; shoe tapes; pictures printed on cloth; handkerchiefs without embroidery or trimmings, in pieces; sheets without embroidery or trimmings; varnished bags for packing purposes; fabrics, white or colored, plain, printed or with stripes, plaids, worsted or not, such as used generally in women's and children's clothes, men's shirts, linens, curtains, table cloths, etc., unless otherwise specified; 1.00.—Tapes or ribbons with or without rubber, for belts, garters or suspenders; non-specified rubber cloth; 1.10.—Sandals with fiber or wood soles; knitted shirts with or without silk embroideries or strings; curtains without laces or trimmings; handkerchiefs, plain, cut; rubber clothing; rubber blankets; rubber hats and caps; tablecloths and napkins; hosiery and knitted caps; 1.20.—Garters and suspenders, 1.30.—Saddles with leather soles; table covers, plain or trimmed; belts; hammocks; embroidered sheets; volle or lace material, non-specified; 1.40.—Corsets; shirt fronts; bridles; men's clothes; hats and caps; 1.50.—Men's drawers, non-specified; knitted clothes, non-specified and without laces, embroideries, needlework

or silk; 1.60.—Wraps and shawls; shoes; collars and cuffs without embroidery, needlework or laces; fabrics with embroidery or needlework; non-specified underwear without embroidery, needlework, or laces; fabrics with silk provided it does not cover more than 25% of the total surface; gallons, fringes, and any other trimmings; 1.70.—Neck-ties; curtains with passementeries or other trimmings; pillow cases without embroidery or laces; embroidered handkerchiefs; 1.80.—Ready-made clothes, non-specified, without laces, embroideries, needlework or silk; 1.90.—Cloth trimmings, with or without small part of silk or any other material; men's shirts; lace and passementeries, non-specified; hats trimmed with silk, laces or fine feathers; 2.00.—Wraps and shawls with embroideries or laces; 2.20.—Crochet table or bed covers and curtains; voile and lace table and bed covers and curtains; pillow cases with embroideries or laces; shirt fronts with embroideries, laces or needlework; voile and gauze, plain or embroidered; lingerie with embroidery, needlework, laces or silk; 2.40.—Non-specified lace or voile manufactures; 2.70.—Clothes with laces, embroidery, needlework or silk; 2.60.—Layettes with silk ribbons or laces; collars and cuffs made of voile or lace, or with embroideries, needlework or voile or lace trimmings; 2.80.—Gloves, 3.00.—Clothes made of voile or lace, or with embroideries or needlework, with or without trimmings of any kind; clothes made of linen and silk provided that silk does not cover more than 25% of whole surface; 3.20.—Mercerized articles will pay same duty as non-mercerized.—Embroidered articles, non-specified, will pay 20% over the duty on the same articles not embroidered.

Silk, Vegetable, Animal or Artificial.

Artificial silk; strainers and cloth for them; 1.00.—Shoe laces; sewing and embroidering thread; raw silk, animal or vegetable; velour or material for hats; 1.50.—Silk covered buttons; hat linings; silk threads, fringes or ribbons; umbrellas; hats, finished or not; rubber cloth; 2.00.—Rugs and carpets and material for them; silk tassels, with or without cotton, linen or wool; rubber blankets; tapes for belts, garters; suspenders; rubber coats and clothes; 2.50.—Table covers, cushions, bed covers and curtains; velvet ribbons; ribbons with either weft or warp made of cotton, linen or any other fibre; belts; fringes; umbrella or parasol covers; galloons or passementeries; garters; black material for mantles, such as jersey, or crepe de chine; material made of silk and cotton or any other fibre; 3.00.—Non-specified trimmings; neck-ties; strings for watches, eyeglasses, etc.; plain mantles, shawls and mufflers; handkerchiefs; silk and cotton clothes; non-specified silk underwear; 3.50.—Knitted or lace articles, non-specified; non-specified articles; laces and voile; clothes made of non-specified material; non-specified materials either of pure or mixed silk; 4.00.—Embroidered mantles, 4.50.—Non-specified ribbons; gauze and tulle; 5.00.—Gloves, 6.00.

Tobacco.

Chewing and snuff tobacco, 2.00.—Raw tobacco, 2.50.—Cigars, 3.00.—Cigarettes, 4.00.

Sundries.

Numismatic, geology or natural history collections; artificial eyes; preparations for destruction of insects and parasites, for agricultural purposes, provided they are designated with their own name; clocks for public buildings; free.—Merry-go-rounds, 0.02.—Cardboard for hat manufacturing or imitation of morocco; wood and metal clocks without trimmings; 0.20.—Moving picture outfits, 0.60.—Moving picture films, printed, 5.00; not printed, 0.10.—Glue, 0.10.—Funeral wreaths and accessories, 0.50.—Oil paintings, 0.50.—Epaulets made of metallic thread, 1.00.—Artificial teeth; 1.30.—Designs, models, and patterns for industrial purposes, non-specified; 0.01.—Stereoscopes, 0.80.—Stereoscopic pictures, 0.35.—Metallic flowers, tassels and other ornaments, non-specified; 2.00.—Non-specified masks; 1.00.—Materials for manufacture of artificial flow-

ers and plants; 0.60.—Games, non-specified, 10.00.—Artificial plants, 2.00.—Gold or platinum watches, 10.00.—Silver watches, 4.00.—Watches of any other metal, non-specified, plated or not, 1.50.—Clocks with parts of marble, jasper, or any other stone or metallic trimmings, 0.50.—Portraits, 0.70.—Tents will pay 10% over the duty on the fabric they are made of and the duty on the poles.

Articles, Importation of Which is Prohibited.

Beside those specified before:
Outfits for coining money; domestic, non-cancelled postage stamps; silver, copper and metal coins; paper with seal of republic, such as is used for collection of internal revenue; plates for manufacture of banknotes with name of republic.

EXPORT DUTIES.

Straw and other material for manufacture of hats, 1.00 per kilo.—Stuffed birds, 3.00.—Tagua, 6% ad-valorem.

A presidential decree of May 11, 1919, established a duty of 5 per cent. on all platinum exported from Colombia after June 15, 1919. The same decree prohibited all exportation of gold, without prior Government permit, as long as the existing restrictions on the exportation of gold are in force in Europe and the United States. After satisfactory proofs have been furnished that like amounts have been imported from European countries or the United States, permits will be granted for the exportation of an equal amount of gold in substitute thereof.

The duty on postal importations of coined gold or gold dust has been fixed at 1½ per cent. ad valorem.

SHIPPING.

Steamer service is maintained on both the Atlantic and Pacific sides. To Buenaventura on the Pacific, local steamers of all lines running south from Panama make regular passage, the distance being 255 miles (571 kilometers); express teamers, however, do not stop at Colombian ports. Cartagena and Barranquilla (in reality this is Savanilla, for Barranquilla is rather the city on the river), are regular ports of call for steamers between Colon and European ports, on such lines as the Royal Mail, the Compagnie Generale Transatlantique, the Veloce, and the Spanish Compania Transatlantica.

The Holland Line of steamships "Koninklijke West Indische Maatschappij," which was suspended during the war, intends to renew service.

The vessels shall touch at Colombian ports on their way to New York, and again on their return from New York.

Cargo will be accepted for Havre, Amsterdam, Rotterdam, and London, by transshipment at Amsterdam.

The Colombian Congress is considering the establishment of a line of steamers to run between Colombian ports and New York. The institution of a coast-wise traffic also is proposed, to go as far east as Maracaibo in Venezuela, and west through the Panama Canal to Buenaventura and the other Pacific ports. The Tropical Steamship Corporation of New York has started a service between New York City, Kingston, Jamaica, Cartagena and Puerto Colombia.

The Caribbean Steamship company, Ltd., will inaugurate a passenger service between New York and ports in Jamaica and Colombia.

The firm Hija de Joaquin Pujóll, of Barcelona, Spain, has recently established a line of Spanish sailing vessels between that port and Puerto Colombia, chiefly to carry Colombian fruits and cotton.

The board of trade at Barranquilla has solicited the co-operation of the board of trade of Cali in securing an extension to Cartagena and Barranquilla of the steamship service now carried on with the Colombian Pacific coast ports of Buenaventura and Tumaco.

A petition has been submitted to the National Government for authorization to establish navigation between the Nariare and Guaviare Rivers.

The only steamship line touching at Santa Marta is that of the United Fruit Company whose vessels load bananas from the company's plantations in the district. The service is not regular, but passage and freight may be booked from Boston, New York, and Philadelphia, and also Baltimore, according to the run of the particular steamer bring up fruit from Santa Marta. In December, 1918, 14 steamers sailing from the United States called at Santa Marta, 12 of which came direct and 2 by way of Cartagena and Puerto Colombia.

The Santa Marta Railway Company maintains a steamer service from Cienaga to Barranquilla, with sailings twice a week, on Tuesdays and Saturdays, the boats connecting with the train from Santa Marta.

A stock company with capital of \$1,000,000 subscribed by the principal business men of Barranquilla has been formed to open the Bocas de Cenizas and convert the river port of the city into a seaport.

The government of the Department of Valle has signed a contract with G. Amsinck & Co., of New York, for the construction of the pier at Buenaventura. The firm will lend a million dollars to the Department, part in cash at 8 per cent. interest and the remainder in necessary materials, bearing 6 per cent. interest. The pier will be 153 meters long and 36 wide.

FINANCE.

As a general rule, Colombia has a yearly deficit, her national expenditures being normally in excess of her revenues.

According to a table of public revenues and expenditures from 1906 to 1918, inclusive, the sum of the revenue of the 12 years was \$186,413,347, gold, and the expenditures \$188,534,603, gold, resulting in a deficit of \$2,121,256. The receipts and expenditures appear even from 1906 to 1914; the years 1916, 1917, and 1918 show deficits of \$2,255,265, \$1,484,865, and \$1,162,515, respectively; and only one surplus, of \$2,781,390, in 1915.

The national budget for the fiscal period from March 1, 1919, to February 28, 1920, the receipts of the year are placed at \$15,207,350 gold, the expenses to be distributed as follows:

Department of government, \$6,392,301; foreign relations, \$351,320; finance, \$995,297; war, \$1,785,549; public instruction, \$835,017; agriculture and commerce, \$207,247; public works, \$1,133,718, and treasury, \$3,606,896.

For the year 1919-20 the budgets of the Departments of the Republic show for the entire country a combined expenditure of \$10,404,173 and a total revenue of \$10,479,891.

The proposed budget of 1920-21 presented to congress by the treasury department estimates the national income for the fiscal year from the 1st of March, 1920, to the last day of February, 1921, at \$19,740,750 gold, the principal source of revenue being calculated as follows:

Customs duties, \$10,000,000; salt mines, \$1,000,000; income tax, \$1,000,000; officially stamped paper and postage, \$900,000; excise tax, \$800,000; consular fees, \$800,000; telegraph lines, \$750,000; salt deposits, \$655,000; coining of money, \$600,000; oil companies, \$500,000; railways, \$407,000; canalization tax, \$400,000. The expenditures are fixed at \$19,324,000.

The budget of Bogota for 1919 was fixed by the municipal council at \$1,281,247, including the receipts from the street railway, the slaughterhouse, and the aqueduct.

The income tax law has been modified by presidential decree of April 11, 1919, to the effect that native or naturalized citizens residing in the country, and who receive an income, or native or naturalized citizens whose residence is not within the country, but who receive an income from Colombia, will pay the following annual tax: 3 per cent. on incomes from capital invested; 2 per cent. on incomes from personal or real property exploited directly or indirectly by the owners; and 1 per cent. on incomes derived from personal labor or trade.

DEBT.

The foreign debt of Colombia, on January 1, 1919, amounted to 3,583,215 sterling pounds, divided as follows:

Consolidated debt of 1896	1,838,600.
Five per cent. bonds of 1906	278,880
Six per cent. loan of 1911	279,180
Six per cent. loan of 1913	1,144,085
Five per cent. loan of 1916	72,470

There was also a debt of £275,000 due to the Banque Bauer Marchal and Co., of Paris. The government has also guaranteed £192,500 five and a half per cent. bonds of the Great Northern Central Railroad.

The sinking fund for the loan of 1906 was not applied in 1917 or 1918.

The internal debt is classified under two heads: the consolidated and the floating debt. The consolidated debt is represented by the perpetual annual subvention payable to the Catholic Church under the terms of the Concordat with Rome. The amount paid during the year ending December 31, 1917 under this head was \$198,635 gold. The outstanding amount of the floating debt on Feb. 28, 1919, was \$4,187,455.

With the purpose of covering the amount of the deficit in the treasury of the Republic a loan of \$4,000,000 gold has been launched, to which the creditors of the Government who wished to exchange their notes for those of the public debt were to be subscribers. The new issue consists of treasury notes payable to the bearer, of 1, 2, 5, 10, 25, and 50 pesos denominations, which will be received at par in any payment made into the national treasury, and for the redemption of which the product of stamp issues and documentary papers will be set aside. The Government will grant 2 per cent. annual interest to the bearer.

An executive decree of December 11, 1918, orders the issue of the Colombian internal Debt Bonds, authorized by laws 23 and 58, of 1918, to the amount of \$3,675,000. These bonds bear interest at the rate of 9 per cent, and the proceeds of same are to be used in the payment of the expenses of the Government and of debts contracted by the Government.

The department of agriculture and commerce contracted in March, 1919, in behalf of the Government a loan of \$320,000 gold, subscribed by the following commercial organizations: Commercial Bank, \$100,000; International Banking Corporation, \$100,000; Banco Sucre, \$50,000; Angel Lopez y Cía., \$25,000; Roberto Restrepo y Cía., \$15,000; Vazquez, Correa y Cía., \$10,000; Banco Dugand, \$10,000; and Banco Republicano, \$10,000. The Government also obtained a loan of \$200,000 in Cartagena with advantageous conditions.

The issue by the Government of bonds of the internal debt of Colombia, under powers granted it in conformity with law amounts to \$7,885,000, of which \$2,655,000 are set aside for the construction of public works.

The amortization of bonds of the internal debt, during the first six months of 1919 amounted to \$44,225, paid at a cost of \$33,315.

BANKING.

There are about 30 banks in the Republic. The following are the most important:

Banco Central. Bogotá. Capital, paid up, \$2,300,000. Reserve fund, \$1,353,985.

Banco de Colombia. Bogotá. Capital, \$780,000.

Banco Hipotecario de Colombia. Capital, paid up, \$500,000. Reserve fund, \$27,600.

Banco Comercial de Barranquilla, Barranquilla, Colombia, S. A. Established in 1904. Paid up capital, \$313,700. Reserve fund, June 30, 1917, \$91,700.

The All American Banking Corporation, the Mercantile American Bank of Colombia, and the Royal Bank of Canada, are to establish branches in different sections of Colombia.

There is a considerable banking activity in the different departments of the Republic. The Banco Hipotecario del Pacifico, with a capital of \$600,000 has been founded in Cali. It will have a branch in Buga. The Bank of Pamplona has been authorized by the Government to establish a department for mortgages for the period of 50 years. The Bank of St. Gil obtained the same

concession, but must limit its operations to Santander del Norte, Santander Sur, Boyaca. In Popayan the Banco Hipotecario has just been founded with a capital of \$300,000; and finally the Banco Mercantil Americano de Colombia has recently established a branch in the city of Armenia, Department of Caldas.

A banking institution under the name of Banco López has recently been founded in Bogota with a capital of \$2,000,000 distributed in shares of \$100 each. The primary object of the bank is to foster the exportation of Colombian products.

Branch Banks have been opened by the Banco Mercantil Americano and the Banco Lopez de Bogota in Bucaramanga, and by the Banco Lopez in Barranquilla; and a branch of the American Banking Corporation of New York in the city of Cali.

The Centennial Bank, with a subscribed capital of \$100,000 gold, has been founded in the city of Sogamoso.

Five large banks in London formed an association with a capital of 2,000,000 for the purpose of organizing a bank in Colombia under the name the English Bank, with its main office in Bogota and branches at Medellin and Manizales.

The Government has authorized the Banco Sucre of Medellin to increase its capital from \$1,000,000 to \$2,000,000 gold, the issue of 10,000 shares. This bank was founded in 1915, with a capital of \$130,000, divided into 1,300 shares of \$100 each; in 1911 the capital was increased to \$170,000; in July, 1912, to \$300,000; and in November of the same year to \$400,000.

Banking Holidays.

January 1, New Year's Day; January 6, Epiphany; February 2, Purification; March 25, Annunciation; April 1, Holy Thursday; April 2, Good Friday; April 3, Holy Saturday (half day); May 13, Ascension Day; June 29, St. Peter and St. Paul; July 20, Independence Day; July 24, Birthday of Bolivar; not universally observed; August 6, Founding of Bogota (at Bogota only); August 7, Anniversary of the Battle of Boyaca; August 15, Assumption; September 8, Nativity; October 12, Discovery of America; November 1, All Saints' Day; December 8, Immaculate Conception; December 25, Christmas Day.

MONEY.

The monetary unit, under the law of June 12th, 1917, is a gold dollar, called a peso, equivalent of approximately \$0.96, weighing 1.5976 grams and is 0.91676 fine. The subsidiary coins are silver and nickel; the former being 0.900 fine, and 50, 20, and 10 centavos in denomination; the latter are 1, 2 and 5 centavos. The paper peso is the ordinary means of exchange, convertible at and representing the above gold peso. The Colombian paper peso has risen in value, and in Oct., 1918, it was quoted at a premium of about 7 per cent, over the American dollar.

Gold coins are: the *doble condor*, worth 20 pesos; the *condor*, 10 pesos; *medio condor*, 5 pesos, and the *cuarto de condor*, 2½ pesos. Only the two last named have been coined so far.

The paper money in circulation is of the denominations, 1, 2, 5, and 10 pesos.

By decree of May 8, 1919, the President provided that while the ban on exportation of gold coins remains in force in Europe and the United States, no one may export gold in coin, in bars, dust, or any other form from Colombia without permission from the Government. Travelers who sail from Colombian ports to foreign parts, however, may carry as much as 200 pesos in gold coin with them upon the payment of regular duties.

The President has decreed the exemption from postal charges of packages of coined gold imported into the country, such packages to be carried free from the office in which they are received to destination.

By law issued March 1919 the admission of coined sterling pounds and bills representing pounds is permitted to the national treasury.

The money in circulation in Colombia is, according to official figures, 1,700,000 pesos coined gold, 10,180,000 paper money, 6,460,000 silver coins, and 1,194,000 nickel coins; to this must be added 3,200,000 pesos in treasury certificates, and 1,200,000 small mortgage certificates of banks, making approximately a total of 30,000,000 pesos in circulation.

From August, 1914, to July 31, 1919, the amounts of moneys coined in the mint of Medellin have been: Gold, 7,914,172 pesos; silver, 705,011 pesos gold value. The latter part of July there were more than 2,500,000 pesos on hand to be coined. The amount minted for the month of July was 1,500,000 pesos, gold, and 40,000 pesos, silver.

The mint at Medellin has imported from the United States an electrolytic outfit of a capacity sufficient to coin all the gold required by that establishment.

In August, 1919, the first issue of gold coined in Bogota was put in circulation. The coins are half condors, equal in value to an English pound sterling.

The department of the treasury has ordered the mint in Bogota to issue nickel coins of the denomination of 5 centavos. These coins are badly needed in facilitating business transactions.

Under date of September 3, 1919, the Government promulgated a decree authorizing the treasury department to circulate \$600,000 in treasury certificates of the denomination of \$1. These certificates are to be issued exclusively in exchange for certificates of the same class of \$10 denomination.

The Government of the United States decided recently to issue unrestricted licenses permitting exports of gold to Colombia with the object of encouraging and facilitating the circulation of large quantities of American gold coin in that Republic, and the banks in Bogota agreed to receive said gold coin at par. The Colombian Treasury Department sent to its collectors, and to customhouse and salt-mine administrators, etc., a circular recommending that payments made to them in gold coin of the United States be accepted at face value.

The Banco Mercantil Americano de Colombia, for the use of

its branches in Bogota, and other points in the Republic, has imported \$6,000,000 in coined gold.

On August 27, 1918, paper currency amounting to 300,000 pesos in bills of old issues, and which had been exchanged for bills representing gold coin, were incinerated. The total amount of paper money incinerated up to the date mentioned, and which had been exchanged for bills representing gold coin, aggregated 999,163,700 pesos.

According to a decree concerning certificates of gold bullion, anyone may deposit gold bars properly assayed in the mints of Bogota and Medellin, receiving in exchange certificates representing the cash value of the gold so consigned reduced to Colombian money.

RAILROADS.

The construction of extended railroad lines in Colombia is a very expensive and difficult undertaking on account of the peculiar geographical features.

The only available outlet from Bogota to the Atlantic coast, at the present time, is the Magdalena River which is impassable at several points on account of rapids and has a bar at its mouth which impedes navigation.

As yet there is no continuous railroad system within the Republic, but there are many short lines at present engaged chiefly in local traffic, which, when their plans are fully carried out, will connect the coast on both the Atlantic and Pacific sides with the centers of production.

The principal railway companies are:

Barranquilla Railway and Pier Co., Registered in London in 1898. Capital, \$1,250,000. Mileage, 18.

Santa Marta Railway Co., Ltd. Registered in London in 1887. Authorized capital, \$3,000,000; issued, \$1,745,850. Mileage, 99.

Great Northern Central Railway of Colombia, Ltd. Registered in London in 1907. Capital, \$2,500,000. Concession, about 312 miles.

Dorada Extension Railway, Ltd. Registered in London in 1905. Capital, \$1,750,000. Mileage, 71.

Colombian Northern Railway Co., Ltd. Registered in London in 1898. Capital, \$1,500,000. Mileage, 30.

Cucuta Railway Co. (Compañía del Ferrocarril de Cucuta.) Incorporated in 1865. Capital, \$1,800,000. Concession, 35 miles and 247,100 acres waste land.

Pacific Railway of Colombia (Compañía del Ferrocarril del Pacifico). Incorporated in 1908. Capital, \$1,400,000. Mileage under construction, 362.

Colombia Railways and Navigation Co., Ltd. Capital, \$3,750,000.

Colombian Central Railway Co., Ltd. Registered in London in 1905. Concession, 66 miles. Capital, \$1,500,000.

Colombian National Railway Co., Ltd. Registered in London in 1899. Concession, 81 miles, and 123,000 acres of land. Capital, \$4,500,000.

The Antioquia Railroad during 1918, transported 175,750 parcels of merchandise, weighing 10,880,505 kilos, to Medellin.

The receipts of the Southern Railway (Ferrocarri! del Sur) in 1918 amounted to \$133,381.57.

The profits of the municipal street-car line of Bogota during the first six months of 1919 amounted to \$179,190. This sum represents an increase of \$11,767 over the same period of the previous year.

A presidential decree issued in July, 1919, authorizes the extension of the railroad of the north from Nemocon to Chiquinquirá.

The Municipal Street Railway of Bogota carried 6,895,730 passengers in 1918; the gross receipts were \$345,091; the expenditures, \$159,953; and the net income, \$185,137.

There is now a proposition on foot in Bogota to secure a concession to build a railroad from Bahia Honda, on the Goajira Peninsula, east of Rio Hacha and south through the Valle de Upar region, crossing good cattle lands and tapping this mining country, the idea being eventually to extend this road to Bogota, since this route is said to be much better than any other offering in the country.

The commission which is investigating the territory through which the extension of the Sabana Railway is to run, from Facativata to Pacho, has submitted reports showing that all property owners who hold land between El Dintel station and the river port which is to be the terminus of the line offer to cede the right of way free of expense, as well as the land needed for stations, depots, warehouses, yards, etc., and also the construction material. Furthermore, the municipalities of Pacho, Supata, San Francisco, and some others have agreed to provide 4,000 workmen for construction.

The President has authorized the use of \$100,000 internal bonds in the extension of the railway from Tolima to Imague.

The departmental assembly of Antioquia has created a board to consider plans for the Uraba Railway and submit a draft of the right of way to the assembly of 1920.

A presidential decree authorized the completion of the Carare Highway and permits the ministry of public works to organize two committees of engineers, one to formulate projects for similar roads in the Bayaca section and the other for those of Santander.

The firm of Pedro A. Lopez & Co., of Bogota, has just signed a contract with the Department of Tolima for the construction of a railroad between Ibague, and Ambalema, on the Magdalena River, to connect at its river terminus with the La Dorada Railway and at the other end with the new Girardot-Ibague line, which is a link in the projected Pacific Railway. The importance of the newly contracted line is that it will do away with the necessity for using the upper Magdalena River as a link in the route to Bogota, and will provide an all-rail route from La Dorada to the capital.

The Tolima Railway extension has proceeded beyond the Gualanday slope, leaving only the Ibague plain to be traversed.

The President of the Republic approved the steps taken by

the government of the Department of Santander concerning the reorganization of the Puerto Wilches Railway. An agreement was made to receive at par in Santander the bonds issued by the Government, and to use the proceeds of same, or \$120,000 in extending, in so far as possible, the present railway.

In the early part of July, 1919, work was begun for the extension of this railroad from Puerto Wilches to Bucaramanga.

The Government of Huila signed a contract with the firm of Pedro A. Lopez, of Bogota, for the construction of a Railroad from Espinal to Caqueta, via Neiva, the work to be completed in six years.

A contract was made in July, 1919, by the treasury department with the Girardot Railway Co., replacing the contract made on August 6, 1917, the total debt in favor of the Government was fixed at 858,994 pounds sterling on December 31, 1916. It also provides that 40 per cent. of the gross profits of the road are to be used to pay off the debt and interest, and 60 per cent for maintenance of the railroad.

The Colombian Congress enacted a law authorizing an extension of eight years from February 18, 1919, in which to complete the construction of the Pacific Railway, to aid the company in obtaining a loan up to \$10,000,000. The Government stipulates that the company shall construct at once a suitable station at Port Buenaventura, together with warehouses large enough to meet the demands of traffic. The railway is to maintain facilities for the loading and unloading of coal intended for export, reduce the freight rate 1 cent, gold, per kilometer per ton on coal shipped abroad, and grant permission to the Government of the Department of Valle to establish in or near Buenaventura coaling stations, the railway to supply same with the necessary rolling stock.

The governor of the department of Cundinamarca has been authorized by the departmental assembly to contract a loan of \$4,000,000 gold for the extension of the La Sabana Railroad and the construction of electric trolleys in the department.

The governor of the Department of Caldas has negotiated a loan of \$600,000 gold with the banks of Manizales for the completion of the Caldas Railway.

By a recent law the assembly of Cundinamarca authorized the departmental government to contract a domestic or foreign loan to the amount of 5,000,000 pesos, either independently or in agreement with the National Government. The loan is intended to extend the Sabana Railway to the Lower Magdalena and its subsequent prolongation to the Meta River.

In July, 1919, a contract was signed in the department of public works by the attorney for the Pacific Railway Co. and the national government to turn this railroad over to the government. According to the contract the railway company will refrain from making any indemnification effective, and the Government will take over the drafts issued by the railroad company in favor of its creditors. The administration of the railroad as well as all its construction material will be handed over to the Government, which will continue its operation. The govern-

ment will guarantee with notes of the interior loan the payment of the drafts issued by the railroad in favor of its creditors.

The National Government has granted the petition of the state governments of Atlantico and Bolivar, and has divided equally between them Colombian bonds to the value of \$200,000, for the construction of a highway connecting Barranquilla with Cartagena.

The governor of Tolima has signed a contract for the construction of a branch railroad from Espinal to Saldana, via Guamo. The projected line will pass through a wealthy stock-raising and agricultural section.

An electrical engineer of the Westinghouse Co. of the United States has estimated the cost of electrification of the railroad of Antioquia at \$400,000 gold.

In July, 1919, work was begun on the laying out of a railroad from Santander to Timba in the Department of Cauca. The department is building the road.

The municipality of Medellin has contracted a loan of \$250,000 with the Banco Alemán Antioqueño of that city to build an electric street-car line that will cover the city from north to south and east to west.

POSTS AND TELEGRAPHS.

There are 843 post offices in the Republic.

There are 625 telegraph offices with 20,000 kilometers (12,000 miles) of Government lines in operation.

Representatives of the Marconi Wireless Telegraph Co., recently contracted with the Department of Interior of Colombia to install an international wireless telegraph station in Bogota powerful enough to establish communications between Colombia and the countries of North and South America. This station will be used for commercial and government messages. The Government of Colombia did not grant the Marconi company any special concession, and is, therefore, free to negotiate in future with other wireless companies should it be deemed expedient so to do. The Bogota station is to be the most powerful in South America, and will form the center of wireless communications between North and South America. It will have sufficient power to communicate direct with England and Japan. Important rate concessions, amounting to not less than 40 per cent. of the cable charges, will be made on government, commercial, and newspaper business.

The Government approved a contract for the installation of a radio station in Puerto Velillo or some other suitable point along the coast, the station to be of sufficient power to maintain communication day or night with the international station to be installed in Bogota by the Marconi Wireless Telegraph Co. This company is also to install a station in one of the islands of the Archipelago of San Andrés and Providencia.

The city government of Cartagena has approved the contract for the installation of a modern telephone system in the city.

In July direct telephone service was established between Bogota and the port of La Dorada.

The general directorate of telegraphs has recently signed a contract for the installation of a telephone system in the department of the Valle del Cauca, by which the city of Cali will have direct service with Cartago through Palmira, Cerrito, Guacarí, Buga, San Pedro, Bugalagrande, Tuluá, San Vicente, Roldanillo, Córdoba, and Boqueron del Dagua.

The South and Central American Telegraph Co. (Ltd.), of New York, has made a contract with the ministry of the government to establish, maintain, and operate a cable service between Cartagena and other seaports of the Atlantic coast, and connect them with the "All America system" of cables, and also with the cable system of Venezuela, if satisfactory to that government. The contract is for 21 years.

The Government is contemplating the establishment of long-distance interurban telephone service to be operated in connection with the telegraph service, which is Government owned.

The telegraph business in the Republic of Colombia has increased very rapidly during the last few years, the number of monthly messages handled having jumped from 42,300 in 1910 to 88,000 in 1918.

By law of April 11, 1919, the minister of state was authorized to receive bids for the carrying of domestic mails in airplanes over the following routes: From Bogotá to Barranquilla, calling at Manizales, Medellín, and Cartagena; from Bogotá to Pasto, stopping at Manizales, Cali, and Popayan; and from Bogotá to Cucuta, stopping at Tunja and Bucaramanga.

The parcel-post service between Colombia and the United States has increased very rapidly. Official figures show that the value of merchandise received at the port of Barranquilla from the United States during the year 1918 was \$199,867 showing an increase of nearly \$22,000 over the previous year.

Parcel post delivery in Colombia is not as simple as in the United States.

When a package arrives the addressee, upon notification, must make out a manifest in triplicate on a form provided for that purpose. The package is weighed and inspected and the import duty is assessed upon the gross weight of the package, the rate being that of the highest dutiable article contained in the package. The following charges are then assessed in addition to the duties:

2 per cent. of the duty for the conversion fund.

5 per cent. of the duty for the roads' fund.

5 per cent. of the value of the shipment for consular invoice.

"Corretaje" (literally "brokerage"), a charge for interior

service. On parcels from European countries this charge is 5 cents per package regardless of weight, but on parcels coming from the United States the charge is 5 cents for the first pound and 1 cent for each 4 ounces of excess weight.

Valuation charge: 10 cents on each manifest to cover charges for appraisal.

Protests have been made by importers against the increased rate of brokerage on parcels from the United States, but since these charges are specified in the convention now in force be-

tween both countries, the Colombian government cannot change them on its own accord.

Agreements have been made between the United States and Colombia whereby the maximum weight applicable to parcel-post packages exchanged between these countries and the United States will be 10 kilos (22 pounds), instead of five kilos (11 pounds) as heretofore. The arrangement was effective March 1, 1919. The postage rate remains at 12 cents a pound or fraction of a pound.

PUBLIC WORKS.

Almost all of the new engineering work of Colombia is being done by the National or Departmental Governments, while practically all public improvements in the cities are owned by the municipal governments.

In January, 1919, the Government proposed to contract a loan to the amount of \$4,000,000. Of the proceeds of this loan \$125,000 is to be used in rebuilding the customhouse at Barranquilla, \$24,000 in the payment of the first installment for the construction of houses for workmen, and \$75,000 in improving the customs coast guard service.

The National Government has set aside a part of the receipts derived from water transportation taxes on the Magdalena River for the improvement of the Cauca River, and has named the members of the canalization board of the lower Cauca.

Congress has passed a law appropriating \$60,000 for the construction of a hotel, quarantine station, warehouse, hospital, aqueduct, etc., at La Dorada, a port on the Magdalena River. This law also sets aside \$20,000 for the sanitation of Puerto Niño on the Magdalena River and provinces for the erection of public buildings in the city of Manizales, Department of Caldas.

The recent visit of the President of the Republic to the coast is expected to result in the near future in the realization of many long agitated works of public improvement, among the most important of which are the sanitation of Puerto Colombia, the principal port of entry of the Republic; the construction of a water-pipe line to supply Puerto Colombia with water from Barranquilla; the construction of a new customhouse to cost \$125,000 at Barranquilla; and, probably the most important of all to Colombia, the resumption of dredging operations on the Magdalena River. This dredging has been carried on by the Government on a small scale for many years as maintenance work, but the efforts put forth have not been sufficient and the river is gradually being lost through lack of necessary reclamation work. At various times work has been at a standstill for lack of funds.

The river reclamation work will be generally under the Minister of Public Works, Bogota, but directly under the Junta de Canalización del Río Magdalena, Barranquilla.

The cost is estimated from 2 to 7 million pesos gold.

For the purpose of bringing about this important work and constructing jetties and breakwaters to make it possible for ocean steamships to come directly to Barranquilla the leading mer-

chants and bankers of that city formed a corporation under the name of "Compañía Colombiana de las Bocas de Ceniza". The corporation has a capital of \$1,000,000, 10 per cent. paid up. The object of the organization is to obtain a contract from the Colombian Government for the construction and operation of the jetties and breakwaters and the wharves to be built on the river front at Barranquilla, and it is expected that the \$100,000 paid-in capital will be used as a guaranty to the Government. After the contract is obtained, negotiations will be opened with large engineering firms, preferably American, for the construction.

The President has authorized the following loans: 100,000 pesos for Manizales to build a municipal palace and theater; 75,000 pesos for Ibagué for a metal aqueduct; 10,000 pesos for Santuario, Caldas, for the installation of an electric plant.

The city council of Medellín decided to contract a loan of three million pesos gold to be used in the installation of water supply; construction of the Municipal Palace; installation of telephone system of 1,500 telephones; installation of a hydro-electric plant; electric street railway for the city and suburbs, and other minor public works.

The municipality of Barranquilla authorized the president of the municipal council to negotiate with the consul of Colombia in New York and with the New York banks concerning a loan of \$3,000,000, the proceeds of which are to be used in the paving of the streets, the building of sewers, the sanitation of the city, the construction of public school-houses, and the erection of a municipal building.

The Department of Santander del Norte contracted a loan with two banks in Bogotá for the construction of the road from Cucuta to Río Magdalena, the work for which was authorized by the Congress, the Government and the department assembly having appropriated \$55,500. The Department of Narino obtained a loan for the construction of a road from Pasto to Rosario. The municipality of Antioquia obtained a loan of \$3,000,000 to enlarge the electric-light plant, establish street-car service, pave the streets, and to complete the fair grounds.

The President has issued a decree postponing the delivery of the 500,000 pesos authorized by law to be expended on the highway from Cucuta to Magdalena until further notice. The sums set aside for other public works are divided as follows: For the completion of the Sarare road, 100,900 pesos; for the southern highway in Narino, 50,000 pesos; for the sanitation of Puerto Colombia, 25,000 pesos; for repairs on the Barranquilla custom-house, 100,000 pesos; for preliminary work for workmen's houses, 100,000 pesos; aid to the public works in the department of the Cauca, 40,000 pesos; for the aqueduct of the port of Buenaventura, 25,000 pesos; for the Pizarra highway in Boyaca, 30,000 pesos; for canal works in Bogotá, 100,000 pesos; for public works of the department of the Magdalena, 100,000 pesos; for the Puerto Colombia aqueduct, 237,000 pesos; for the Puerto Colombia hotel, 63,000 pesos; for the Cartagena-Barranquilla highway, 200,000 pesos; for reparations to the La Popa Castle in Cartagena, 20,000 pesos, and for the Honda highway, between

the Upper and Lower Magdalena, 30,000 pesos. This is besides appropriations already specified for railway construction.

The President has approved the project of a loan for Girardot for \$50,000 gold for the construction of certain public works for that city.

The National Government has authorized a loan of \$75,000 gold to build the sewer system of Ibaguë.

PUBLIC UTILITIES.

There are only five electric light and power plants in the country, and electricity is not generally used in mining, railways, or agriculture.

The tramways of Bogota are owned and operated by the municipality, having been purchased in 1910 from the American company which formerly owned them. The lines are about twenty-four kilometers in length, and nearly all have been electrified since their purchase by the city. The power plant produces 1,050 horsepower by steam generators. About 7,000,000 passengers are carried each year.

Cía. de Energía Eléctrica, a local concern capitalized at \$1,200,000 gold, furnishes electric light to the city of Bogota. Power is generated hydro-electrically. Five thousand horsepower is developed. In 1918 there were 65,000 private electric lamps and 2,500 municipal.

The West India & Colombian Electric Co. operates the electric-light plant at Santa Marta and a telephone system at Barranquilla. The generating plant consists of 100 horsepower Lefell turbine driving a 90 kilowatt alternating 110-volt generator, and is located at Bonda on the Manzanares River, 10 miles from Santa Marta. The company has 600 subscribers. In Santa Marta there is also an auxiliary generating consisting of a 120 B. H. P. Diesel oil engine belt connected to a 90 kilowatt generator of the same rating as that at the hydroelectric plant on the river.

The company has imported a number of small motors with the idea of using them as a means of power to be used in grinding corn meal, shelling coffee, etc., in the neighborhood. It is also bringing down a small irrigation outfit for purposes of demonstration with the idea of promoting the use of power for irrigation in the surrounding country.

A hydroelectric plant is to be installed to use the water power on the Rio Gaira, 4 miles above the station and town of that name on the Santa Marta Railroad and 7 miles distant from Santa Marta. A 335-foot head of 800 cubic feet per minute is developed at the lowest periods of the year during the dry season. Approximately 450 horsepower will be produced, to be used for the operation of the Santa Marta ice factory and for electric lighting in the village of La Gaira, and the plans are to have 300 horsepower available for factory purposes.

Colombia as a field for the investment of foreign capital offers, by reason of its geographical location and the bateness of its resources, many opportunities for substantial returns. Great Britain is estimated to have placed no less than \$33,000,000 in

Government bonds, railways, mines, etc. Most of the British-owned railway lines are prospering, and some mines have realized substantial returns. France and Belgium have invested fair-sized amounts in minning development, Germany in banks and platinum mines, and the United States in mines, banana lands, municipal loans, etc. Those familiar with Colombia unanimously agree that its natural resources are vast and that, when it is opened up by means of railways and roads, the development of the country will be very rapid. As the country advances, public-utility enterprises—now few in number—will be established, manufacturing enterprises will be enlarged and improved, agricultural areas will be developed, and new mines will be discovered and worked.

PRINCIPAL DEALERS IN COLOMBIA.

BOGOTA

Shoes.

El Aguila Negra.—Almacen de Londres.—Gomez Ancizar. — S. Araujo.—Baptiste y Co.—Bonnet y Co.—J. Bonnet.—A. Callamand.—Hnos., Camacho.—C. y L. Castillo.

Rubber Goods.

F. Cuello.—Hnos. Duran Lopez.—G. Duran Lopez.—Trutten y Eberhardt.—Hnos. S. Fayad.—J. M. Fonnegra.—M. Haasch.—J. G. Hernandez.—Kopp y Co.—A. Polanco.

Confectionery.

E. Arrubla.—Bazar Frances.—C. Castelló.—S. H. Castelló.—J. B. Coustelx y Co.—B. Elbois.—Lago y Co.—E. Largacha.—A. Maguin.—B. M. de Marquez.

Leather.

I. Camacho, Agualarga.—J. Campuzano.—J. Galindo.—Hnos. Garay.—L. Garay.—G. Gaviria.—J. Paramo.—P. penen, La Barnesia.—I. A. Rodriguez, La Merced c. 13, num. 113.

Perfumeries.

H. Baumé.—J. M. Buendia e hijos.—J. B. de Bugard.—Hnos. Cortes.—L. Curvo Marquez.—A. Escolar M.—Garcia Medina y Co.—F. Huard.—Victor Huard.

Tailoring.

B. J. Adaine.—D. E. Alvarez.—J. Arias.—P. L. Barros.—A. Bernal.—T. Bohorquez.—E. Bowden.—A. Cardenas.—A. Cardenas Vanquez.—J. Corredor.

Hatters.

E. Artiaga.—El Brazo Fuerte.—C. y L. Castillo.—J. Cerra.—A. Garros.—Goulfree y Co.—Hnos. Jaramillo.—J. Lausson.—Medina y Co.—R. Ospina.

Jewelry.

E. F. Alvarez.—P. J. Baquero.—R. Bauer.—A. Caicedo.—A. Gilede.—C. E. Hernandez.—E. A. Lecoutre.—M. Llana.—J. Llana.—Hnos. Madero.—J. Madero.—L. M. Madero.—M. M. Madero.—Sandez y Marchand.—A. M. Moreno.—G. M. Muelle.—C. M. Ortiz.—M. Ortiz.—L. M. Pena.—G. Phelke.—E. Pischacon.—A. Pomez.—L. Posse Salas.—E. Quintana.—Frankel y Stern.—Goubert y Thorin.—Eberhard y Truten.—J. Welstchl.

Importers and Exporters.

Abelló y Co.—Hnos. Abondano.—L. J. Amador y Co.—P. Angulo G.—R. Arias.—Hnos. Aya.—C. B. Baquero.—L. M. Barrera.—J. Barriga.—T. Briceno.—Augusti Cabo y Co.—C. Camacho y Co.—J. Campuzano.—L. Cardenas Pinto.—C. A. Castelló.—A. Cespedes.—M. Defrancisco.—M. Dumaine.—Hnos. Duran Lopez.

Druggists.

F. I. Barberi.—H. Beaume.—Franco y Bermudez.—G. Bister.—J. M. Buendia e Hijos.—R. M. Corral y Co.—C. Escobar.—R. Flores.—García Medina y Co.—J. García Valenzuelal.—Hnos. Garzon.—Pizarro Gonzalez y Co.—Gutierrez y Co.—Hernandez y Co.—A. Herrera R.—C. Hurtado.—J. Lemus.—R. Martinez.—L. Menendez.—Duran y Mercado.—Hnos. Montana y Co.—Silva y Montoya.—F. J. Montoya.—E. Paez.—J. M. Pulido.—J. Rodriguez.—Salas y Co.—L. Salazar.—R. San Martin.—San Vicente de Paul.—N. Sotomayor.—F. J. Tapia.—C. Uribe.—P. Valencia.—Vargas Vega y Montana.—J. M. Vargas.—L. Zerda.

Hardware.

J. de Acevedo.—Araujo y Co.—L. M. Barrera.—R. Balcázar.—Fernandez y Concha.—Ferreteria de Pacho.—Ferreteria de la Pradera.—F. Fonseca Plazas.—El Gato Negro.—J. D. Gomez.—La Gradadina.—T. Moncada e hijos.

Photo Supplies.

A. A. Ariza.—J. M. Buendia e hijos, Carrera Sa. nums. 280 y 282.—A. B. Caro y Co., c. 12 numero 293.—J. M. Carrasquilla.—E. V. Duperly, c. 11 num. 114 y 116.—Hnos. Esperon.—Rey Fallon y Co.—L. Lara.—E. Montalvo y Co.—E. Schimer.

Dry Goods.

Hnos. Abello.—B. J. Adaine.—Adujar y Co.—Almacen de Cuelgas.—Almacen de Londres.—Almacen de Paris.—Alvarez y Co.—Vargas y Anzola.—Bazar del Rosario.—Bazar Vera-Cruz.—G. Camacho y Co.—Hnos. Cardenas.—N. Casas.—C. E. Castello.—G. y L. Gastillo.—F. Duque.—Hnos. Echevarri.—G. Escobar.—E. W. Fernandez.—F. Fonseca Plazas.—Gaitan y Pardo.—Hnos. Garcin.—M. Gaughan de Uribe.—Hijos de Gomez.—Jaramillo y Co.—Lago y Co.—M. Lastra de Marquez.—A. Maquin.—B. A. Martinez.—D. Molano.—F. M. Pardo.—Hnos. Nieto.—R. Padilla.—Hnos. Pombe.—M. C. Rodriguez.—Hnos. Silva Otero.

Stationery

Santiago Bayon, c. 15, num. 2.—R. Balcázar, Carrera 8, num. 453.—Colon Villamizar y Gamboa, Carrera 6, num. 618 A.—Concha c. 14.—M. Cortes y Co.—E. Gamboa y Co.—C. Gonzalez B.—Grillo, c. 12.—Castro y Guerra.—"El Mensajero" 3, c. Real.—C. Pleschacon.—Camacho Reidan, c. 12.—Samper Matiz 1a, c. Real.—M. Sarraz.

BARRANQUILLA.**Custom Brokers.**

R. Castro.—Gilberto Lozano G.—Elias Mathieu.—C. M. Sojo.—Ricardo Steffens.—A. Toledo.

Importers and Exporters.

Palacio Alzamora y Co.—T. Anitua.—Arturo Arbin.—A. Aycardi y Co.—Baena y Co.—A. H. Berg y Co.—O. Berne y Co.—Moller Breuer y Co.—Bischoff y Co.—Francisco Carbonel W.—P. Carbonell.—J. Castellano y Co.—Castellanos y Co.—Diego A. de Castro y Co.—G. R. Certain.—Correa y Heilbron.—Cortissez y Co.—Empresa Hanseatica.—Hnos. Fallace.—Rafael Fernandez.—Francisco Ferrans.—Franco Gonzalez y Co.—A. Galofre y Co.—J. Gerlein.—Gieseken y Co.—C. J. M. Goenaga.—Hijos de Gomez Casseres.—

Franco Gonzalez y Co.—A. Heilbrin y Co.—H. Helm y Co.—Francisco J. Díez, "La Joya Literaria".—F. Lebolo.—Hnos. Lopez.—Rodriguez y Luque.—Tomas Magri.—Hnos. Marine.—J. de Medina y Co.—Evaristo Obregon y Co.—Pacini y Puccini.—Aparicio Palacio y Martinez.—Rodriguez y Perez.—J. B. Roncallo y Co.—M. A. Roncallo.—Isaac Senior.—A. Struns.—Salcedo y Urueta.—Vengocchea y Co.—A. Volpe y Co.

CARTAGENA.

Santiago Araujo y Co.—L. J. M. Arrazola.—R. Benedetti y Co.—Vda. de Leon de Blas.—M. Caceres G.—R. del Castillo y Co.—Americo Giasdelli.—Hnos. Dager.—Hnos. Diaz.—N. Emiliani.—Hnos. Espriella.—Diego Espriella e hijo.—Miguel Fadul Z.—Rafael Fernandez.—Andrade y Ferrer.—Eladio Ferrer.—Franco Cow y Co.—F. y A. Franco.—R. Glaeser.—Hnos. Gomez.—Manuel Gomez y Co.—Rafael Henriquez y Co.—J. M. Hernandez.—A. Jaspe.—G. Jaspe.—D. Juliao.—Lecompete e hijos.—Enrique Lecompete.—Vda. de Lemaitre.—Pablo Loos.—Hnos. Lequerica.—Hnos. Lopez.—B. Lopez e hijos.—Pedro Macia y Co.—J. B. Malnero.—D. Martinez y Co.—A. y T. Meluk.—Mendez y Co.—Max Mendez e Hijo.—R. y C. Mendez.—Merlano y Co.—C. Merlano.—Manuel Merlano.—J. V. Mogolion.—Chaar y Morad.—J. Moreno.—J. M. Munoz.—Rafael H. Munoz.—P. Navarro.—J. M. Pasos.—Vda. de Nunez Pereira.—Hnos. Pombo.—B. y L. Porto.—L. Pozo.—Manuel Pretelt.—A. y S. Rabat.—Castillo Ramos.—Ramos y Co.—A. Tono.—J. M. da la Vega.—Velez.—Leopoldo Villa.—R. y A. de Zubiria.

COSTA RICA.

The area of Costa Rica is estimated at 23,000 square miles, or a little less than that of West Virginia. The population, according to the estimate for December, 1915, was 430,701 made up as follows:

Province	Population	Province	Population
San José	131,332	Punta Arenas	22,203
Alajuela	101,783	Limon	23,756
Heredia	46,162		
Cartago	64,659	Total	430,701
Guanacaste	40,806		

About two thirds of Costa Rica, including all of the Pacific coast, is mountainous and hilly, with variations of temperature according to altitude. The land lies low and temperatures are higher on the Atlantic side, and there is a heavy growth of forests. The principal port is Limon, on the Atlantic side.

The Republic of Costa Rica is governed under a Constitution promulgated on December 7, 1871. The Legislative Power is vested in a Chamber of Representatives called the Constitutional Congress, which is made up of 43 deputies, one representative allowed for every 80,000 inhabitants. The members of the Chamber are elected for a term of four years, one-half being renewed every two years. All male citizens over 18 years of age and who are able to support themselves have the right to vote. The President is elected for a term of four years.

Señor Licenciado don Francisco Aguilar Barquero, holding the office of President of the Republic as third alternate, after General Federico Tinoco was overthrown by a revolution on September 2, 1919, organized his cabinet as follows: Secretary of Foreign Relations, Licenciado Andrés Venegas; government and police, Licenciado Carlos María Jiménez; treasury and commerce, Licenciado Carlos Brenew; public instruction, Prof. Joaquín García Monge; war and navy, Licenciado Aquiles Bonilla; and promotion, Licenciado Pedro Pérez Zeledón.

Julio Acosta, elected president for four years, took the oath on May 8, 1920 and appointed his cabinet as follows: Minister of Finance, Nicolás Chavarría Mora; Minister of Foreign Affairs, Alejandro Alvarado Quiroz; Minister of the Interior, Claudio González Rucavado; Minister of Education, Miguel Obregon; Minister of Public Works, Narciso Blanco.

Aquiles Acosta García was named First Vice-President; Alfredo González Flores, Second Vice-President, and Arturo Volio Jiménez, President of Congress.

The new election law, which provides for the election of

senators, deputies, and municipal officers by the direct vote of the people has been passed by congress. The selection of President and Vice-President of the Republic is made by an electoral college composed of those who, at the time of the election, are senators and deputies, and by those who, at any time within a period of six months, may have been President of the Republic, a cabinet officer, senator, deputy, or judge of the supreme court. The clubs or organizations formed in a province to work for the candidacy of senators and deputies have the right to register their tickets and to be represented at the time of casting and counting the ballots. Candidates receiving the majority of the votes are elected to the offices.

PRODUCTS.

The principal agricultural products of Costa Rica are coffee and bananas. Costa Rican coffee brings an excellent price especially in Europe where it is considered among the finer grades. Costa Rica is the great banana producing country of the Western Hemisphere, its exports being greater than that of any other American Republic. There is a good banana trade with New Orleans, Mobile, New York, Boston, and also between Limón and Bristol and Manchester.

Maize, sugar-cane, rice and potatoes are commonly cultivated. The Government monopolizes the distillation of spirits. There are about 347,475 head of cattle, 64,710 horses, 70,198 pigs, besides mules, sheep and goats.

The coffee crop available for export for the season of 1919-20 was estimated at about 3,000,000 pounds. For the season 1918-19 it was between 2,500,000 and 2,600,000 pounds.

The crop on the Atlantic side is reported as very heavy, also in the vicinity of San José, but in the districts of Heredia and Alajuela it is reported as very light.

An estimate of the tobacco crop in 1919 shows that on the Atlantic side, 127.5 acres produced 130,000 pounds; on the Pacific side, 161.5 acres produced 98,000 pounds, making a total of 289 acres producing 228,000 pounds.

As the result of the propaganda in Costa Rica for increasing the area of cultivated lands, it is estimated that the area sown to rice in 1918 was 30 per cent. greater than that of 1917, while the acreage planted to corn in 1918 increased about 7 per cent. as compared with the area of this cereal cultivated during the previous year. In 1918 the wheat and bean crops were about 10 per cent. greater than in 1917.

Experiments in silkworm culture are being made by San José. The worms are grown in colonies and are classified and kept in separate sections according to their development.

The United Fruit Co., which control the banana trade in Costa Rica, has agreed to raise the price it pays for a first-class bunch of bananas to 39 centavos, gold, and that of second-class bunches to 39 centavos, in case the grower has increased his banana plantation by at least 20 per cent. in area. This increase will mean a total of 1,000 hectares, counting the present area under cultivation at 5,000.

The great number of men who have been mobilized for military service have seriously interfered with agricultural development in Costa Rica. Fewer acres have been planted this year, and in the lowlands there are complaints of lack of rain.

MINING.

The mineral resources of Costa Rica have not been developed. Exploration work has been done and a few mines are in operation but mining production is not considerable. Oil prospecting has been recently done with promising results and there are two or three concessions for oil development which may become realities in the near future.

Large quantity of drilling machinery for use in the exploitation of the petroleum industry has been sent to Costa Rica. The Sinclair interests propose to drill one well at Uscari, Province of Talamanca. This place was selected after careful investigation by a number of experienced geologists who believe that petroleum exists in the territory.

Mining laws in Costa Rica are generally regarded as inadequate and both the Congress and mine operators have been contemplating a revision.

The method of acquiring titles in Costa Rica other than by purchase is briefly as follows: The Government is vested with the ownership of the subsoil; therefore the right to mines may only be obtained by denouncement or filing of claim. The formalities of survey and location and the preliminary mine work having been fulfilled, the judge makes delivery of the mine and issues the respective title thereto, which holds good while the mine is being developed, but should the property be abandoned for a term of two years the mining title is lost. As soon as the delivery of the mine has been made, the denouncer possesses all the rights of full ownership and may therefore sell, mortgage, or dispose of it in any way that he desires. Like any other real estate property, mines are subject to the payment of a land tax and also to the payment of a 2 per cent. tax on the net output.

No distinction is made between native and foreign acquisition of mining rights or concessions nor with the administration or distribution of the mineral production.

INDUSTRIES.

There are 3,296 factories in the Republic, including coffee drying establishments, starch, broom and woodwork factories.

The cement industry has progressed considerably in the past few years in the country, as tiles of all kinds as well as pieces of masonry used in construction and ornamentation are now manufactured, including pedestals for statues, columns, various kinds of flowerpots, washbowls, bathtubs, sewer pipes, grave-stones, and all articles that have cement as a foundation.

FOREIGN TRADE.

The foreign trade of Costa Rica for 1917 was valued at \$16,977,406 gold, or \$747,691 less than for the year 1916. There

was a decrease in imports of \$1,007,685 and an increase in exports of \$260,994.

On account of the changes in the government, which have recently occurred through violent methods, no detailed reports are available concerning commercial conditions, specially as to foreign trade.

The coffee exported from August, 1917, to November, 1918, had a gross weight of 25,246,711 pounds, or 1,797,839 pounds less than the exports during the same period of 1916-17. Of this quantity 25,179,933 pounds were clean or fully milled coffee, and 66,778 pounds in parchment, the first classification forming nearly 98 per cent. of the total exports. The coffee referred to was distributed as follows: United States, 96.45 per cent; United Kingdom, 0.61; Panama, 0.93; Spain, 0.74; Chile, 0.69; Italy, 0.45; Cuba, 0.09; Nicaragua, 0.03. The estimated production of this coffee by provinces was: San José, 49.52 per cent; Heredia, 21.74 per cent; Alajuela, 20.09; and Cartago, 8.65 per cent.

The exports from Port Limon for January, were as follows: Bananas, 321,001 stems; coffee, 70,700 kilos; cacao, 121.167 kilos; crude rubber, 2,218 kilos; hides, 30,157 kilos; wood, chiefly balsa, 536,986 kilos; live animals, etc., 4,400 kilos; oranges, grape-fruit, 1,379 boxes; gold in bars, 306 kilos; vegetables, 195,862 kilos.

The Costa Rican products exported to the United States in 1918, were as follows:

Animals; cattle, \$105,733.—Art works, \$2,327.—Brass, fit only for remanufacture, \$2,037.—Cocoa or cacao, crude, \$228,901.—Coffee, \$2,063,440.—Copper; refined, in bars, plates, etc., \$287,498.—Copper, old and clippings, for remanufacture, \$10,939.—Cotton, unmanufactured, \$22,039.—Dyewoods, \$6,725.—Fruits, \$4,027,413 (mostly bananas).—Hides and skins (except fur skins), raw or uncured, \$298,380.—India rubber, crude, \$25,646.—Iron and steel, scrap, \$64.—Leather; belting and sole, \$2,387.—Manganese, oxide and ore of, \$184,575.—Shells, unmanufactured, \$4,833.—Sugar-cane, \$44,666.—Tungsten ore, \$19,081.—Wood, unmanufactured, \$238,100.

Costa Rica imported goods from the United States, in 1918, as follows:

Agricultural implements, \$5,905.—Asphaltum, manufactures of, \$27.—Blacking, shoe paste, etc., \$4,507.—Brass and manufactures of, \$5,015.—Breadstuffs, \$213,229.—Broom corn, and manufactures of, \$1,897.—Brushes, \$1,361.—Buttons, and parts of, \$1,220.—Cars, automobiles, and other vehicles, \$129,536.—Cement, hydraulic, \$15,382.—Chemicals, drugs, dyes, and medicines, \$81,243.—Chewing gum, \$2,477.—Clocks and watches, and parts of, \$1,275.—Coal and coke, \$9,292.—Confectionery, \$3,114.—Copper, \$1,727.—Cotton, manufactures of, \$365,059.—Earthen, stone, and china ware, \$4,673.—Electrical machinery, appliances, and instruments, \$105,020.—Fertilizers, \$85.—Fibers, vegetable, and manufactures of, \$56,243.—Fish and fish products, \$10,513.—Fruits and nuts, \$7,494.—Furniture, metal, \$7,553.—Glass and glassware, \$13,561.—Glucose (corn sirup), \$6,450.—Grease, \$2,475.—India rubber, and manufactures of, \$13,572.—Ink, \$2,960.—Instruments and apparatus for scientific purposes, \$727.—Iron and steel, manufactures, (including machinery), \$179,765.

Lamps, chandeliers, etc. (except electric), \$3,508.—Lead, and manufactures of, \$4,531.—Leather, \$82,492.
 Malt, \$6,488.—Matches, \$1,325.—Meat and dairy products, \$88,291.291.—Musical instruments, and parts of, \$4,114.
 Naval stores, \$7,802.—Notions, \$1,006.—Olecloth and linoleum, \$1,128.—Oils, \$86,586.
 Paints, pigments, colors, and varnishes, \$18,172.—Paper, \$66,243.—Paraffin and paraffin wax, \$58,372.—Perfumeries, cosmetics, etc., \$3,815.—Phonographs, graphophones, etc., and records, and materials for, \$6,076.—Photographic goods, \$3,585.—Plated ware (except cutlery and jewelry), \$4,808.—Plumbago, manufactures of, \$2,023.—Roofing felt and similar material, \$6,938.
 Salt, \$1,999.—Seeds, \$2,419.—Shoe findings, \$3,559.—Silk, manufactures of, \$3,495.—Soap, 4,695.—Spirits, wines, malt liquors, and other beverages, \$12,990.—Starch, \$5,534.—Surgical appliances (not including instruments), \$4,210.
 Tobacco, \$10,890.—Toys, \$2,640.—Type, \$430.—Umbrellas and parasols, \$3,307.—Vegetables, \$31,356.—Wax, manufactures of, \$673.—Wood, \$21,363.—Wool, manufactures of, \$10,915.—Zinc, \$13,209.

According to a law passed in December 14, 1918, which provides for the refunding of the interior debt by issuing 10,000,000 colones (\$2,500,000, according to present exchange values) in bonds, Government monopoly of matches and cigarette paper was established.

The importation of wood or wax matches and cigarette paper in sheets or packets, as well as the manufacture of these articles in the country, can be made only by the Executive, to be sold by wholesale, but under the condition that they be retailed according to government regulations.

The importation or manufacture by private persons of wood or wax matches or cigarette paper in sheets and packets is considered as a fraud on the Treasury and they are treated as contraband.

A special stamp tax of 1 centimo a box is imposed on the stock of wood or wax matches in the country; for each sheet or packet of 60 pieces of cigarette paper, 3 centimos.

Merchants in Costa Rica have been slow in ordering goods from abroad because of the uncertainty of the exchange situation. Exchange has been high and constantly varying. Stocks of goods are now very low.

Consuls of Costa Rica are located in the following cities of the United States: Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Galveston, Tex.; Los Angeles, Cal.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Norfolk, Va.; Philadelphia, Pa.; Portland, Ore.; Saint Louis, Mo.; San Francisco, Cal.

CUSTOM REGULATIONS.

The Costa Rican Customs Regulations provide that the consignee must present the commercial invoice with the original bill of lading in order to obtain delivery of the cargo. Failure to comply with this regulation entails upon the consignee the necessity of preparing a provisional invoice which must be presented to the customs together with a deposit of \$2.50 (American gold) as a guaranty for the production of the commercial invoice. Shippers are, therefore, urged to make it their invariable practice to forward to the consignee on the steamer carrying the cargo two

copies of commercial invoices, together with the steamship bill of lading.

Commercial invoices prepared in Spanish and signed by shipper should contain the following particulars: Date of invoice, name of steamer and master, port of entry, name of consignee, marks and numbers, number and kind of packages, gross weight of each package and total weight in kilos, substance, class, and name of merchandise according to the nomenclature of the Costa Rican tariff, value of merchandise in American gold, expense of merchandise to the port of entry or destination in American gold, and origin of merchandise.

Compliance with the above regulations will facilitate the delivery of cargo, eliminate complications and additional expense to the consignee, and result in better trade relations generally.

Financing Foreign Trade.

Exports to the United States are financed by 30, 60 and 90 day bills. The local seller draws on a credit opened by the American importer, but generally against bill of lading. This credit is ordinarily open in the United States on one per cent. acceptance commission and six per cent. interest. Bills drawn in dollars on New York always find a ready sale. The currency in which the local exporters' bills are drawn depends on the destination of the goods; if for Europe, generally in sterling, but even some of that trade is in dollars. Before the war most was in sterling, because the chief export, coffee, was mostly to England. European credits are usually 90 days; in the United States 30, 60, 90 days, and drawings accordingly. These are usually sold to one of the local banks or private bankers.

All banks and bankers are kept advised by their correspondents of discount and exchange rates at New York.

Drafts and currency are converted into local currency at the ruling rates of the day, which are regulated much by the supply and the demand.

The margin or profit usually calculated in the purchase of first-class commercial bills is one of two points. The New York discount rate is taken as a basis.

In the import trade the commission for collecting clean items on San José is $\frac{1}{2}$ per cent. documentary items the same; clean items and documentary items on various other cities, $\frac{3}{4}$ per cent. The commission for obtaining acceptance if bill is not to be left for collection is $\frac{1}{4}$ per cent.

The bill stamp charges in Costa Rica are: For clean items, 2 centavos (\$0.093). It is customary for these charges to be paid by the drawee of the bills. Deductions for stamp charges are never made from remittance in payment of such collections. No charge is made for stamps on checks remitted in payment of collections. Protest charges are 6.50 colones (\$3.02). These charges are collected from the drawee, if payment is made after protest.

The charge or expense beyond the protest fees connected with

the return of dishonored items is $\frac{1}{2}$ per cent. false commission. Payment of such charge or expense should be made by a deposit with the New York bankers of the house or bank returning the dishonored item.

It is customary for the maker of the draft to pay the collection and banking charges, and not for the importer to bear these charges, or to assume any other supplementary payments or charges.

Local banks do not guarantee the payment of drafts accepted by any firms.

The local banker giving the information does not accept the consignment of goods. Parcels may be sent for delivery, with the usual charge of $\frac{1}{2}$ per cent. on city items and $\frac{3}{4}$ per cent. on out-of-town items, upon payment or acceptance of drafts.

One month is allowed for making entry of the goods at the customhouse, except matches, gasoline kerosene, powder, and other dangerous or explosive goods, when 48 hours are allowed. No fine is imposed but a storage charge of 60 centavos per 100 kilos per month, or fraction thereof, for five months for ordinary goods. A storage charge of 10 centavos per kilo for each 24 hours or fraction thereof, beyond the 48 hours, is charged for dangerous or explosive articles as noted. It is customary for the consignee eventually to pay these charges. The goods are sold at auction if not entered within six months from date of arrival at the customhouse. The Government has no regular storage house but makes charges as above for the time the goods remain under its charge.

The bank does not arrange for storing the goods while awaiting clearance. Drawage charges are subject to bargain, rates are from 25 centavos to one colon for a single package.

No insurance is available for goods in the customhouse in San José. The customer generally pays all charges imposed by delay in entering the goods.

When goods arrive in advance of the related documents they may be entered by giving a satisfactory bond to the Government. There are usually no expenses connected with this procedure. Documents almost invariably precede the goods.

When the client desires to sell the goods the local bank or banker attends the sale, if authorized to do so.

If instructions are given to have the goods returned storage or customhouse charges and reshipping charges must be paid after first giving the Government notice of the intention to return the goods. They must first be cleared, but no duty need be paid, only the other charges. If the merchandise is returned to the country of shipment after duty has been paid a refund is obtainable, less possibly some small charge.

The customary phrase to be included in drafts drawn on Costa Rica in order to enable a remittance of the full face amount of such bills is "All charges for account of drawee." By using this phrase all collection charges and all interest is understood to be collectible from the drawee and to be remitted by the local bank.

CUSTOM TARIFF.

The following is the list of duties now in force on imports to Costa Rica. Unless otherwise stated, the figures are in Costa Rican money, and express the amount collected per kilo, gross weight, of merchandise:

Earth, Stones, Crystals, Ceramic and Mineral Products

Cement, coal and coke, fertilizers, raw asphaltum, earthenware tubes for sewers and draining; water filters; fiber cement in plates, for buildings; free.—Stone, marble, jasper, alabaster, raw or in blocks; slates for roofs; slates for use in schools, with or without frames; slate pencils; gypsum powder; common or hydraulic lime; milling stones; bricks; roof tiles; ventilating shafts; fire-stones; carbons for electric light; 0.03.—Marble, jasper, alabaster, natural or artificial stone, manufactures weighing over fifty kilos; blocks; stones for art works and industrial purposes; earths for paints; earthenware; paving blocks; tiles and bricks; tar and shoe polish; earthenware or glass jars; mould bottles, without engraving, marks or lettering for drugs or foreign preparations; infants' bottles; advertisements; skylights; plates or tiles; 0.05.—Window panes, transparent, without drawing or coloring, up to 46 centimeters long; chinaware, plain, non-varnished flower-pots; wood preserving paints; 0.10.—Earthenware or porcelain bath-tubs, furniture, electric insulators and electrical supplies with or without metal; reflectors, vases, letterings; crystal vases, glasses, bottles and all ordinary table glassware; emery stoppers; window panes, painted or stained, up to 46 centimeters long; window panes of any kind, over 46 centimeters; electric bulbs; druggist supplies; barrel stoppers; scientific instruments; oil jars, glass, marble, alabaster and stone mortars; plates for furniture, billiards and soda fountains; emery; glass powder; grinding stones; marl; putty; plaster; billiard chalk; mineral ochre; stove polish; decorated chinaware; plain lamp shades; imitation alabaster; 0.20.—Decorated earthenware flower-pots; fine or Japanese chinaware; glass eggs; stained glass tableware; 0.40.—Marble, gypsum and artificial stone statues weighing from 10 to 15 kilos; raw mineral talcum; 0.50.—Glass crystal or terra-cotta; paper weights, instands or fancy flower-pots; fancy bottles; toys and statues, weighing from 2 to 10 kilos; unframed mirrors; high quality paints in paste, powder or cakes; dentists' gypsum and cement; fancy knobs; 1.00.—Marble, jasper, alabaster, porcelain, terra-cotta and glass; art goods, not less than 2 kilos in weight; artificial eyes, eyeglasses and lenses, watch glasses, beads or any other art object used as personal ornament, and non-specified objects less than 2 kilos in weight; atomizers; candelabra and chandeliers; unmanufactured coral, amber and jet, funeral wreaths; 2.00.—Amber, coral and jet cigarette holders and art goods; 5.00.

Metals and Metal Goods.

Silver dust, bullion or bars and coins except gold; prohibited.—Iron or steel rails, ties; locomotives for railroads and tramways; gasoline cars; iron and steel bridge parts; boats and marine engines; railroad telegraph and telephone equipment imported exclusively for mining purposes; machinery and supplies for extraction of gums and balsams; fire pumps, hose and extinguishers; printing equipment and type; filters; buoys; stone crushers; fuier extracting machinery; disinfecting apparatus; barbed wire; mosquito netting; iron and steel perforated slates for building purposes; machinery and supplies for electric light plants; free.—Gold coins, bullion bars; butter and cheese machinery; hydraulic cranes; windmills; plows; rollers; harvesting, cultivating and sewing machines; grain-shaking machines and all other agricultural machinery and tools; farming carts and wagons with wheels, not under ten centimeter rim; iron shapes for building purposes and iron pipes for draining purposes; air-tight or wooden tanks or sijos; free.—Pig iron; steam, gasoline and hydraulic engines; windlasses; anchors; tele-

graph and telephone poles; quicksilver; ship cable and chains, having over one centimeter links; cranes; incubators; 0.02.—Knitting machines; coffee, rice, sugar-cane and cacao machinery; soap-making pans; pipes with joints and accessories, not nickel-plated; scales for live-stock; lightning rods; galvanized iron roofing; iron plates, bars and rods; anvils; hoops; copper junk; advertising iron plates; 0.04.—Metal axles; picks; scythes; excavators and similar implements; metal solder; metal ingots, plates or sheets, except gold, silver and iron; wire screen over 8 centimeters between screens; car and wagon springs; gates; perforated plates for cars, sinks, or coffee machinery; tin paper sheets; chains and cables, sizes from one-half to one centimeter; horse-shoes; wheelbarrows and wheels for same; metal packing for walls; asbestos for packing purposes; tanks over 1,000 litres capacity; architectural ornaments over five kilos in weight; sculptures and tombstones weighing over 100 kilos; cast-iron pans, boilers and kitchen utensils; large electrical accumulators and transformers; industrial machinery and equipment; oil pressing machines; wedges for machines; electrical industrial machines; merry-go-rounds and similar machines; diving machines; truck wheels; railroad spikes; water pumps; jacks; aeroplanes and dirigibles; coffee grinding machines; smoke stacks and machinery parts; large drills; forges; steam engine grates; plow blades; tin cans without letterings or stampings; flower pots weighing over 46 kilos; holists weighing not over 2 kilos; auto trucks; 0.06.—Common metal wire, covered with plain or rubber or tarred cloth; nails, screws, rivet plates, bolts, nuts, rivets and tacks; hunting ammunition; coffee grinders, operated by hand; sewer ventilators and grates; large electric fans; lead pipes; wire screens, for poultry houses from 8 to 10 centimeters between threads; iron kitchenettes and parts; wire cable, under one-half centimeter diameter; bath tubs weighing over 100 kilos; moulds; carriage axles; 0.15.—Iron furniture; floor cleaners; steel yards over 46 kilos capacity and weights; toilets; carriage cushion and furniture springs; cart and wagon wheels, less than 10 centimeter rim; cart and wagon frames; copying presses; cash registers; typewriters; kitchen machines except tin, aluminum or nickel plated; ice-cream freezers; holsters, from one-half to two kilos; bronze and copper pipes, plated; metal rods, except iron or curtain; faucets; wire covered with cotton or flax for electrical uses; tools; machetes, knives for industrial and kitchen purposes; screw eyes; adzes; flat irons; mortars; hatchets; enameled and galvanized table and kitchen ware, and household utensils; stoves, heaters, furnaces, roasters and kitchen drills; gutters; cattle brand irons; tanks under 1,000 litres capacity; cast iron kitchen utensils, not otherwise specified; wire cloth for strainers and similar uses less than 2 centimeters between threads, except fine brass wire cloth; office grates; casters; iron safes; bath tubs under 100 kilos, except those of tin; manikins; shelf stands; architectural ornaments, not made of tin, and weighing from 1 to 5 kilos; machine cranks; water meters; manometers; thermometers; barometers; compasses; microscopes; pantographs and similar instruments; surveying chains; laboratory electric machines and batteries; boiler cleaning brushes; bells weighing over two kilos belt cramps; electric bells; sculptures weighing from 50 to 100 kilos; iron flower pots, 10 to 46 kilos in weight; non-specified small machines; gasoline, steam or, electric automobiles; motorcycles; 0.20.—Fine brass, copper and bronze furniture, unornamented; reed electric lamps; plain lamps and lighting supplies; rat traps; bottle caps; dental paste or cream tin tubes; iron chains under one-half centimeter; iron locks, padlocks, hinges; metal stoppers; bottle stoppers; marking stencils; lock knobs; musical instruments, except toy; tin strainers; tin, brass and copper domestic utensils; aluminum kitchen ware; saddle frames; steel yards for less than 46 kilos; window and door springs; mica in plates or articles for lighting purposes and machinery; iron pulleys under one-half kilo; architectural ornaments under 1 kilo; tricycles; toy carts and similar articles; 0.40.—Nickel plated or painted iron buckles; nails and rivets for leather goods; furniture casters; tower clocks; veterinary instruments; brass and copper tender hooks; loadstone in small pieces; brass, copper and bronze chains except for curtains; 0.60.—Bicycle parts and accessories; ink-stand and desk sets, not

fancy; pen and pencil holders; plain metal silverware; fancy hunting knives; can openers; nut crackers; cork screws; pocket knives; scissors except garden and tinsmith; razors; hair-cutting machines; bridles; stirrups and spurs; bells, under two kilos; knockers; paper weights and hooks; desk stamps and punches; nickel plated and aluminum utensils for the kitchen, table and bath room; writing pens; toys; skates; hunting loaded cartridges; fire and air arms, up to 6 millimeters calibre; wire bird cages; baskets and flower baskets wall and table clocks; postage scales; laboratory balances; surgical instruments; draftsmen cases; sculptures, 10 to 50 kilos in weight; commercial signs; electrical wire, covered with silk or wool; manicuring cases and parts; curtain copper and bronze chains, rods and knobs; metal umbrella frames; laboratory stills (permit from government is required); glass cutting diamonds; desk electric fans; cane-rings; bronze powder, paste or liquid; baby carriages; metal flower-pots, 2 to 10 kilos in weight; 1.00.—Plain metal strings for musical instruments; common metal needles; uncovered buttons; eyelets; brooches; pins; fans; fishing hooks; eye-glass rims; opera glasses without pearl, tortoise-shell or ivory; cigar cases; money cases; masks; beads; thimbles; medals; pencil holders; lighters; buckles, except for leather goods; hair pins; spangles; key rings; keys; button hooks; fan frames; corset steels; covered wire for milliners; bugle beads; gold and bronze leaf; hand bells; hawk bells; watch springs; crosses, crucifixes and images of saints; fancy ink stands and sets; fancy flower vases; candelabra and chandeliers; unloaded cartridges; fulminants; flowers, palms, plants, funeral wreaths and metallized natural flowers; shooting gallery capsules; silver and gold plated ornamental or domestic utensils; caskets; non-plated watches; fancy table or wall clocks; imitation jewelry; curtain hooks and rings; women's belts; sculptures, under 10 kilos; flower pots, under 2 kilos; watch movements and parts; 2.00.—Revolver capsules; 3.00.—Hunting fire-arms, pistols and revolvers; 5.00.—Swords, fencing foils, daggers, knives, sabers and blades; stiletto canes; fire-arms parts; metal fencing gloves; 9.00.—Sharps shooting rifles imported only with government permit; 10.00 each.—War material, prohibited.—Solid silverware; watches, jewelry, etc.; 6.60 per kilo.—Gold tableware, solid gold and gold filled watches; gold plate and leaf for dentists and other purposes; jewelry, precious stones and pearls; 10% ad-valorem on the amount of the invoice. If the government inspectors suspect under valuation they have the authority to have the articles valued by experts.

Textiles and Fibers.

Knitting yarn, raw cotton with seed; free.—Raw cotton without seed; raw fiber; packing cotton; packing bags; water-proof sheets for packing and roofing purposes; flax fabric for the manufacture of bags; machine belts; fishing nets; raw reed; 0.05.—Cord, string and cable; fibre baskets; floor cleaning brushes; stable and artisan brushes; hose; packing; floor mats; mining fuse; 0.06.—Wicks for cleaning yarn; flux thread and cord; floor linoleum; mattress and pillow hair; cotton string; raw flax; fibre door mats; shoe brushes; upholstering bands; 0.20.—Fiber brooms; 0.30.—Cotton thread; embroidering canvas; bleached cotton fabric; undyed canvas; lamp wick; awnings; tents; rubber cloth and imitation leather; buckram and tailor padding; boat sails; undyed drills; 0.35.—Cotton fabrics, white and sheeting; carpets without wool; vegetable fiber and straw mattresses and pillows; cotton and flax saddle belts; prepared canvas for artists; cotton harnesses; 0.45.—Cotton drills; curtains; ducks, white or dyed, etc.; cotton bed covers and mattresses; umbrellas and parasols; bridles; cotton blinds; blind rods; mattress cover fabrics; oil cotton overalls; fibre brushes, hair and clothes; 0.60.—Cotton percale; pique, gauze, muslin, cambric, nainsook, flannel and similar fabrics; flax fabric and sailcloth; linen drills; rubber cloth table covers; flax shoe soles; 0.80.—Cotton, flax or reed toys; hammocks; traveling bags; fine baskets; slippers; knitted underwear and hosiery; towels, handkerchiefs, non-embroidered aprons; shawls; belts and bands; flag, napkin and table cloth fabrics; linen batiste; sheeting and similar fabrics with or without cotton; duck leggings; cotton mos-

quilted nettings; flax table covers; whips; fiber sole sandals; 1.00.—Cotton napkins; table cloths; sheets; pillow cases and quilts, not embroidered; baby clothing; collars, cuffs and shirt fronts; hat and umbrella covers; plain working gloves; bath gloves and similar articles; shawls with or without silk fringe; umbrellas of mixed silk; stamped curtain fabrics; table cloths; flax curtains; elastic shoe cloth; 1.50.—Cotton ribbons, strings, garters, suspenders, reducing bands, crinoline, petticoats, or shields; covered buttons and heels; elastic cloth for garters; underwear, not knitted; men's shirts; cotton pajamas; crepe; mosquito nets; cut flower leaves; imitation gold and silver cloth; palm hats; flags; bath robes; shoe tops; lamp shades; fancy bags; straw braid for milliners and hatters; linen damask; cotton curtains, except lace; vest pieces; linen sheets without needlework, embroidery or trimmings; 2.00.—Cotton or flax laces, embroideries, needlework, trimmings, passementerie; men's suits; mixed silk shawls and mantles; gloves; neckties; shoe lining whether elastic or not; lace bedcovers and quilts; embroidered muslins, pillow cases, bed covers, and aprons; artificial flowers; fine cotton, palm or straw hats and hat shapes; voile; 2.50.—Half finished clothes; linen sheets, handkerchiefs, napkins, table covers, towels, shirt fronts, cuffs, collars, bibs, pillow cases, table covers and similar articles, with or without cotton mixture; cotton with silk on one side, such as sateen, except plush; 2.50. (Fabrics with silk on both sides are classed as all silk.)—Cotton shoes, 3.00.—Fibre hats, cigar cases and similar articles; linen clothes; mercerized hosiery; cotton and straw hats trimmed with feathers, ribbons, etc.; vegetable fibre fabrics imitating silk; linen trimmings with or without cotton; colored cotton fabrics for walls or similar purposes; 4.00.

Animal Textiles.

Felt in pieces; 0.05.—Hair, bristle and wool waste; hair and bristle brushes; artisans' brushes; hat making felt; knitting wool; 0.20.—Embroidering wool; hair, bristle and wool for mattresses; 0.40.—Wool covers, without silk; horse blankets; 0.80.—Wool balze; wool umbrellas and parasols; insoles; hair or bristle brushes (clothes, tooth or nail); artist hair brushes; shaving brushes; bristle cloth; wool or hair mattresses and pillows; toys; 1.00.—Wool carpets and valises; alpacas; merinos wool, linings, etc.; plain white flannels; damask and imitation; plush with or without cotton mixture; flag cloth; wool hats, unfurnished; shawls, with or without cotton mixture, but without silk; 1.50.—Woolen broadcloth; worsted fabrics and flannels, except white, with or without mixture; wraps, mantles and shawls with or without silk ornaments; table covers; men's hats and untrimmed women and children caps and hats; umbrellas and parasols with a silk mixture; artificial silk thread for knitting and sewing purposes; women's wraps with silk mixture; high grade covers with or without silk embroideries; men's wool night caps; 2.00.—Woolen underwear; mufflers; crepe and voile; wool and silk umbrella covers; wool spats and leggings; wool covered buttons and heels; wool elastic for shoes; finished flags; silk mixed carpets and rugs; silk umbrellas and parasols; raw silk and silk thread; cotton fabrics with linen, wool or silk, but with cotton or wool predominating; cotton or wool with silk mixture hat linings, for men; 2.50. (Fabrics with silk on both sides are classed as pure silk.)—Human hair and imitation, raw or manufactured; wool clothes, with or without trimmings or other material (clothes made of crepe or voile with silk lining are rated as silk); ribbons, bows, laces passementerie, bands, elastic tissue; church attire; wool curtains, with or without mixture; silk elastic cloth for shoes; bass strings; mixed silk wraps; silk carpets and rugs; cushions with silk covers; umbrella covers; silk covered buttons and heels; silk hammocks; wool and silk underwear and shirts; 4.00.—Woolen shoes; 4.50.—Silk ribbons; elastic cloth; garters, suspenders, corsets, neckties, gloves, shawls, wraps, bedcovers, table covers, flags, curtains, handkerchiefs and passementeries; silk fabrics; silk underwear; silk shirts; women and children's silk and wool hats, trimmed; men's silk hats; pure silk hat linings for men; 5.50.—Silk shoes; 6.75.—Silk clothes, with or without lining and trimmings of other material; 7.50.

Paper and Manufactures.

Newspapers; white newsprint; free.—Cardboard and wrapping papers; paper bags; paper boxes without lettering; maps, designs, printed books with plain binding; blank books for schools; writing paper, not printed; filter paper; blotting paper; colored cardboard, music paper; printed music; sand or emery paper; printed or lithographic advertisements, unframed; plain almanacs; waterproof paper for roofing; paper pulp; toilet paper; tags; colored printing paper; 0.05.—Papier maché, in blocks or sheets, or manufactured in household utensils, painted or varnished, without ornaments; paper bricks and walls; boxes for packing shawls; colored paper and cardboard for the manufacture of flowers, balloons, and similar articles; cigarette paper, cut; letter copying paper; blank books; wall paper; transparent photographic paper; oiled paper; tangle-foot; paper patterns; plain cardboard covers for books; moving picture films; cement paper in blocks, mouldings or ornaments for buildings; 0.20.—Commercial blanks and printed labels; 0.25.—Paper lanterns; shoe tips; desk blotters and portfolios; pianola rolls; rubber or painted paper, imitation leather; envelopes; not ornamented cardboard pieces for photographs; architectural ornaments, painted or varnished; writing paper boxes; candy paper boxes and bonbonieres; paper napkins; plain lamp shades; 0.40.—Paper cuffs, collars and shirt fronts; paper home ornaments; toys; chess games, lottery games, playing cards and similar articles; valises and traveling bags; flower paper; gilt or imitation silver; confetti, streamers and carnival toys; manicure cases; stumps; jewel or eyeglass cases; gilt cards for photographs; picture frames with or without glass; framed advertisements; picture albums; crepe paper; paper fulminants; 1.00.—Cards, printed or not; portraits, photographs and paintings; decalcomanias; paper flowers, leaves, fans, masks and any other fancy goods; fancy almanacs; bank bills; notary seals; printed books, bound with bone, pearl, ivory, tortoise-shell and similar materials; paper buttons; 2.00.

Wood and Other Vegetal Material and Manufactures of.

Wood and tin boxes, exclusively for packing and exporting fruits and vegetables; boats and ships; free.—Axles for carts and wagons; agricultural and industrial machinery; yokes; barrels, hoops, casks and hogsheads; oars; handles; railroad ties; shingles; wheelbarrows and parts; pulleys; boxes for soap, vermicelli, cheese, fruits, and drugs, without label; raw corozo or vegetal ivory; raw rubber; oil hands for machines; pulleys of more than 2 kilos in weight; raw feather grass; 0.06.—Wyeing barks; feather grass mats; rubber packing for machines; natural moss; telegraph and telephone poles; shovels; pails; bath tubs; cans, basins, and wash boards; shoe lasts; hat blocks; patterns and forms; globes; baskets; rubber hose; 0.10.—Frames for cars, carts and wagons, and wheels for same, with rims of less than 10 centimeters; cabinet woods; staircases and parts of; merry-go-rounds; boxes for cigars and similar purposes, unvarnished; bellows; levers; unpainted and ornamental mouldings; clothes wringers; barrel faucets; hoists of one-half and two kilos in weight; parquet flooring; dress-making forms; spikes for telephones and telegraphs; sculptures over 10 kilos; toilet accessories; doors and windows; reed doors and screens; scientific and drawing instruments; cameras; telephone and telegraph apparatus; phonographs, etc.; lighting supplies; gymnasium equipment; wheels for carriages with rubber tires; raw cork; rubber tile for floors; straw tubes; rubber tires and cement to repair them; kitchen utensils; 0.20.—Furniture of wood, not veneered and without mirrors; 0.25.—Furniture with parts of willow, reed or imitation, and parts of; 0.35.—Trunks; billiards and similar games; billiard cues; coaches, carriages, busses and wheels for same; separate parts for vehicles; saddle frames and stirrups; matches; hoists of less than one-half kilo in weight; painted, varnished and gilded mouldings; unornamented coffins; blinds; rubber, cork and wooden mats; door signs; organs, pianos and all string and wood instruments, except toys; tricycles; paring boards; 0.40.—Furniture, veneered, not upholstered, 0.45.—Furniture, Vienna, and willow, Chinese style; 0.51.—Frames, without lining, for pictures; wooden rods for blinds; cloth, wool or

linen screens; trays; cotton rubber coats; 0.60.—Furniture, upholstered with silk fabric; 0.75.—Statues, wooden, of 2 to 10 kilos in weight; pencils; fancy boxes of more than 2 kilos in weight; sewing boxes, paper or card cases, etc.; cases for musical instruments; painting boxes; stereoscopes; baby carriages; cloth lined frames; wood and rubber toys, chess games and boards; combs; blotters; pen holders; knobs and rods for curtains; rubber coats, with material of wool; rubber leggings, shoes, boots, caps, etc.; rubber stamps; rubber, gutta-percha and cork sheets, mattresses, life-savers, cushions, syringes, bottles, corks, and all non-ornamental goods; painted moss; fancy baskets; rakes; 1.00.—Furniture, with ivory, pearl, tortoise-shell or metal work; fancy boxes of less than 2 kilos; sculptures less than 2 kilos in weight; coffins lined with wool or silk; rubber or wooden heels; hard rubber and cork ornaments, less than 2 kilos in weight; rubber coats with silk; wood, rubber, corozo and vegetable covers; fans and all fancy goods; corset steels; natural plants and flowers, dried for ornamental purposes; fountain pens; 2.00.—Canes, without silver or gold; 4.00.—Timber boards, poles, etc., for building purposes; when imported for the province of Limón, 0.0143; same when imported for other provinces; 0.02.—Wood, doors and windows, without accessories, for the province of Limón; 0.045.

Hides and Animal Substances.

Tallow, for the manufacture of soap; 0.02.—Greases for soap; dry, salted hides; bones, raw; machine belts; 0.05.—Sperm; ivory and tortoise-shell, raw; common sole leather; "Old Dutch Cleanser"; washing soap; ivory soap; leather hose; 0.15.—Candles of sperm or composition; wax for shoes and floors; composition for tools, copying and phonograph records; 0.20.—Fine leather; tanned furs; cut sole leather; parchment and imitation; leather saddles, trunks, valises, straps, leggings, etc.; razor strops; sandals; aprons; feathers for mattresses and pillows; 0.70.—Sheep and goat furs; raw whale-bone; wax candles; horn, leather or bone combs, purses, pocket-books, etc.; leather hat bands; whips; toys; belts; dentists' composition; fine leather dusters; 1.00.—Common leather shoes with double soles; horn, leather and bone buttons, cigarette holders, pipes, hooks and passementerie; leather gloves; common sponges; feather pens; tooth picks; mattresses and cushions of feathers; wax articles, except candles; corset and whale steels; 2.00.—Calf shoes; 3.00.—Strings, for musical instruments; feathers for hats; stuffed birds; feather capes; bath sponges; artificial teeth; fur for coats, and trimmings; kid gloves; canes; ivory and tortoise-shell pen holders, opera glasses, book covers, buttons, combs, side-combs, etc.; ivory billiard balls and chess games; 4.00.—Shoes of finer leather than calf; 5.25.—shoe findings pay according to the material plus a surtax of 25%.

Foodstuffs.

Cow-peas, beans, Jerusalem peas, living plants, seeds of foreign grass, grain refuse used as fodder; packed hay; free.—Fresh fruits, ice, fresh eggs, fresh frozen meat, wheat; 0.02.—Rock salt, imported for the province of Limón, 0.03.—Barley and other cereals; seeds, other than grass; chestnuts, almonds, etc., with shells; milk in powder form or sterilized; malt for beer; 0.05.—Wheat flour; common rock salt; potato flour; 0.07.—Common salt in grain; 0.06.—Maple sugar; flour of corn and other cereals; corn starch; hops and must of barley or of any other substance; oats, wheat, and other ground cereals; gelatine and tapioca; dried or smoked meats in brine which are not hams, sausages, nor lard; salted fillers; pearled barley; red wine in bottles; 0.08.—Rice; colored beans; 0.08.—Sugar, not refined; 0.10.—Beer; vinegar; soda drinks; hams, sausages, etc.; dried or smoked fish, salted or in brine; raw peanuts; lactogol; macaroni, vermicelli, crackers, and all starch, food, not specified; bird seed; pig's meat in brine; coffee in grain; red wine in barrels, not over 15% alcohol; 0.15.—Condensed milk, pure, with sugar, containing 9.5% of cream, and 25% of solid substances; 0.15.—White wines, not sparkling, in bottles; St. Rafael wine in

bottles; 0.18.—Cinnamon, stick or ground; spices; ground coffee; dry garlic; starch; 0.20.—Pure lard; 0.12.—Pig's lard; cheese; bacon; 0.21.—Granules of pure sugar; potatoes, pickled meats, fish, sauces and vegetables; preserved, dried and sugared fruit; cider of not over 8% alcohol; dry and sweet wines, not sparkling, flavored, bottled; pure fruit juice; fresh vegetables; 0.25.—Refined sugar; beef fat; condensed milk, except as specified above; 0.30.—White, dry, or sweet wines, not sparkling, in barrels or demijohns; common tea; San Rafael wine, in barrels or demijohns; 0.40.—Sweet or dry wines, not sparkling, flavored, in barrels or demijohns; confectionery; jelly; plum pudding; molfort pastilles; non-specified foodstuffs; ocainaltine; vegetal milk; cocoa; ground peanuts; non-alcoholic and non-medicinal syrups; fruits preserved in alcohol; bee honey; cocoa beans; 0.50.—Liquors and spirits, up to 60% alcohol; mixed drinks; bottled bitters; 1.20.—Sparkling wines; cider over 8% alcohol; 1.50.—Liquors and spirits, in barrels or demijohns; 2.40.—The importation of liquors containing over 60% alcohol and of ordinary alcohol is prohibited.

Chemicals, Drugs, Perfumes, Etc.

Veterinary remedies; Taltusa Virus; gasoline; sarnol, carboline, creoline, sulphide of carbon; thymol; free.—Pitch; 0.01.—Cresol emulsion; crude sodium sulphate; crude oil; quicksilver; crude sodium silicate; cyanide of potassium; crude phosphates, nitrates and sulphates of ammonium, potassium, sodium and calcium; commercial sulphate of iron; dynamite (only with Government permit); potash and soda ashes; raw caustic potash and soda; industrial crude cotton oil, 0.02.—Chalk; paraffine; stearine; stearic, palmitic, and oleic acids; palm and cotton oils in barrels; animal carbon; chloride of lime; mineral waters; glucosine; liquid carbonic acid; calcium carbide; lubricating substances; sulphuric acid, in iron drums; sublimated sulphur; commercial copper sulphate; common lubricating grease for wagons; commercial acids; commercial sulphuric acid except in iron drums; refined petroleum; vegetal dyes; vegetal oils; cod-liver oil; liquid ammonia; tincal; precipitated sulphur; alum; tanning extracts; hide preservers; smoke black; commercial ammonium, carbonate and chloride; lead white; minium; litharge; sodium bicarbonate; zinc oxide; washing soda; commercial potassium chloride; Epsom, Glauber, Rochelle and Carlsbad salts; phosphorous; Prussian blue; washed talcum; pumice stone; Tripoli; listerine; lysol and similar substances; commercial turpentine spirits; benzine; vaseline; common glue; gallnuts; industrial ferments; rennet; surgical cotton and cloth; alabastine; pest exterminators; formaldehyde; fumigating substances; tobacco curing substances in amounts of not less than 46 kilos; commercial arsenic; turpentine; saltpeter; common paints, in powder or oil; vermilion; peroxide of hydrogen; dextrine; albumen; precipitated chalk; refined machine oil; disinfecting substances in cake form; prescription, druggist equipment; glass and composition mortars; portable medical electrical batteries; writing, printing and stamp ink; disinfecting, non-specified substances; 0.20.—Cinchona bark; wines, elixirs, and codliver oil emulsions; cinchona bark and meat extract; citric, tartaric and tannic acids; bichromate and permanganate of potassium; commercial chlorate, carbonate, nitrate, and sulphate of barium; roots of Ipecacuana; commercial chlorate, carbonate, nitrate and sulphate of strontium; cream of tartar precipitated carbonate of iron; reduced iron; palatol; dried perchloride of iron; copaiba and Gurgun balsam; pitch of Borgona, Senegal, copal, elemi, lac, sandarach, tragacanth, and incense; ictionola and similar substances; grease of wool; sugar-milk and non-specified sugars; glycerine; official soaps; indigo and cochineal; dyestuffs, not specified; meat extract and meat juice; extracts of malt prepared for pharmaceutical purposes; varnishes; naphthaline; wood alcohol; bee, vegetal and Japanese wax; mineral wax; 0.40.—Alpeche vegetal wax; free.—Simple vegetal drugs, not specified; commercial acetate and sulphate of copper; red precipitate; calomel; sublimate; commercial black sulphate of antimony; commercial sulphates of calcium, iron and potassium; commercial chloride of calcium; pure phosphate of sodium; peroxide of manganese; sulphate of nickel;

pure carbolic, nitric, muriatic and sulphuric acids; oxide of nitrogen; red oxide of iron; commercial sulphide of sodium; hyposulphide of sodium; oxygen in cylinders; Midy pepsin; toluol; lycopodium; synol soap; xylo; licorice in bars or pills; acetone; crystallized benzol; citrate of magnesium; effervescent salts; camphor; organic colors, non-specified; liquid vaseline; non-specified greases; manna; manita; nutmeg; quinine salts or pills, pearls or capsules; capsules of castor oil, cod-liver, and copalba balsam; sugared pastilles; plasters, adhesive, in cloths; empty capsules; tablets and pills of sublimate; peptone and peptonized medicinal soaps without perfume; perfumed soaps, looke and without wraps, in cakes, no more than 50 grammes in weight; 0.60.—Vegetal drugs, pulverized, not specified; natural balsams, not specified; chemical substances, not specified; liquid pharmaceutical preparations, not specified; cocoa butter; medicine chests, empty or filled with tinctures; toilet soaps, not perfumed, not specified; nitrate of silver; pepsine, pancreatine, diastase and maltine; vegetal charcoal in powder form; menthol; saffron; acetozono; cups of quasia; anaquinina; sealing wax; balsams; carmine; santoline; nitro-benzol; croton oil; bandages and similar articles for surgeons; clinical thermometers; surgical instruments; trusses, suspensories; pessaries, bulbs, elastic stockings, abdominal bands and other instruments and apparatus for medical, surgical and orthopedical use, not specified; pure chemical substances, the commercial qualities of which are taxed less than one colon per kilo; shaving soaps and cream, not perfumed; alum sticks; stratum; spirits, essences and juices of fruit for syrups; "Pears" soap, not perfumed; oil of Chaulmuga; perfumed toilet waters; empty seals; aniline colors; Eureka; 1.00.—Unrefined gum powder; toilet vinegar and lotions; liquid dental preparations; hair waters and ointments; benzo-naphthol in capsules; non-specified remedies in capsules; non-specified medicinal tablets; uncovered compressed tablets; fumigating medicinal pastilles; 1.50.—Perfumed medicinal soap; non-specified dental preparations; raw opium; non-specified medicinal plasters; podophiline; scamony; non-specified perfumed toilet soaps; 1.70.—Perfume pastilles; non-specified gold, silver and platinum salts; gold chloride; depilatories; medicinal extracts; medicinal candies, creams and jellies; granulated remedies; Milan flies; Saccharine; Vanilline; mixed powder for fireworks; pure ethylic alcohol; Astier's kola; 2.00.—Non-specified dry pharmaceutical preparations; dried ferments for medical use; Sanatogen; tablets, bulbs and pastilles for hypodermic injections; menthol pencils; hypodermic outfits; medicine pocketbooks; perfume set boxes; serum and vaccine; essential oils for medical purposes, natural or synthetic, not otherwise specified; common perfumes; eucalyptol; 3.00.—Non-specified perfumery and toilet preparations, such as cosmetics, etc.; non-specified essential oils which are not used exclusively for medical purposes, either natural or synthetic; alkaloids, natural or synthetic, and their salts; essences and extracts used in perfumery or in the manufacture of liquors; enanti ether, natural or synthetic musk; civet and gray amber; containers, boxes, labels and circulars for foreign pharmacal preparations, when imported separately; 5.00.

Sundries.

Raw and chewing tobacco, 2.00.—Cigarettes, cigars, pipes, and snuff tobacco, 4.00.—Baggage of passementerie pays only 0.03 for dockage.—Baggage of diplomats, consuls, theatrical companies, circus, tools, or immigrants, are admitted free of duty.—Cattle and horses for breeding purposes; swine, sheep, dogs, domestic animals and fowl, are also free.—Samples of commercial value pay 0.05, but duties paid may be refunded if they are re-exported exactly in the same condition as they were imported. Jewelry and gold and silver manufactures are not considered as samples.

Goods not specified in this tariff will pay same duty as articles of similar nature. Non-specified goods made of several materials will pay as similar goods of the predominating material.

Containers paying higher duty than the contents will be taxed separately.

EXPORT DUTIES.

Woods, by the way of Puntarenas or any other port of the Pacific coast; free.—Fruits, vegetables, earths, minerals, coffee, sugar and maple sugar, and other agricultural products; free.—Furs; 0.0-1/3.—General merchandise; 0.01.—Bananas, special duty in American money, each bunch; 0.01.—Baggages; 0.03.—Cocoa; free.—Oil-cloth; free.—Grain refuse; free.

FINANCE.

For the years 1916 to 1918 the revenue and expenditure of Costa Rica is as follows:

	1916	1917	1918
Revenue	\$3,618,760	\$3,742,500	\$4,586,500
Expenditure	4,297,515	4,534,190	4,570,215

The national expenditures during the months from January to November, 1918, inclusive, were 10,935,424 colones, distributed as follows: Legislation, 228,662; administration and police, 876,971; industry, 954,628; foreign relations, 194,388; justice, 359,641; religion, 18,700; charities, 154,343; public instruction, 921,844; war and police, 2,485,625; navy, 28,090; treasury, 1,582,574; and public debt, 3,129,957. The national receipts in the same period totaled 7,263,489 colones, of which 1,021,150 were customhouse receipts; 2,232,100 were liquor taxes, and 1,115,607 fixed import tariffs.

The total customhouse receipts during the first 11 months of 1918 were 1,021,150 colones, distributed as follows: San José customhouse, 386,117 colones; Limón, 282,781; Puntarenas, 303,098; and Sixaola, 49,154 colones.

By a law of national congress of February 17, 1919, the International Bank of Costa Rica was authorized to advance to the Government during the year the amount necessary to cover the increase over the budget. The bank was to procure the funds from the issue of 10,000,000 colones, authorized by the law of October 5, 1918, and by a loan not to exceed 2,000,000 colones.

The customhouse receipts in the year 1918 totaled 1,165,937 colones, or 47 per cent. less than in 1917, distributed as follows: Through the customhouse of San José, 437,001 colones; Limón, 323,889; Puntarenas, 348,993; and Sixaola, 56,055. In 1917, 2,637,617 colones were received or 1,471,679 more than in 1918.

From January to April, 1919, the Customs Revenue reached a total of 616,128 colones, or 252,661 colones more than that of the like period of the previous year. The revenue was received through the various customs in the following proportion: San José, 346,858; Limón, 136,509; Puntarenas, 115,222; and Sixaola, 17,539 colones.

For the same period the sum of the National Revenues was 3,957,167 colones as against 2,786,168 colones for the corresponding period of 1918, showing an increase of 1,170,999 colones.

The expenditures of the Government for the first four months of 1919 were 5,055,734 colones, divided as follows: Legislative branch, 64,029; Department of Interior and Police, 508,188;

Promotion, 429,368; Foreign Relations, 155,889; Justice, 131,141; Cults, 6,800; Public Charity, 54,711; Public Instruction, 327,055; War and Police, 1,338,281; Navy, 4,990; Treasury, 756,333; Public Debt, 1,128,949 colones.

On January 6, 1919, the President of the Republic issued a ruling concerning the conversion of the internal debt and the creation of funds for this purpose. The Minister of the Treasury was to issue bonds payable to bearer of the denominations of 1,000 and 100 colones. The 16th of September, 1919, was fixed for the first drawing of bonds and the same date of every December, March, June, and September. The payment of bonds and interest-bearing coupons to the holders was to be made by the chief administrator of funds on the day following that of the publication in La Gaceta of the results of the drawing.

The President of the Republic ordered that export bills up to \$500,000 be issued and deposited in the National Bank of Costa Rica, to be exchanged by said bank, upon the payment of their value, for foreign exchange, to be issued in payment of the export tax imposed upon lumber, manganese, hides, rubber, silver bullion, refined and raw sugar, and other similar articles.

DEBT.

The foreign debt of Costa Rica on the first of January, 1919, was as follows:

Four per cent, rising to five per cent. gold refunding bonds of 1911	£2,000,000
External 5% gold loan of 1911, outstanding	1,253,790
Total	£3,353,790

Of the two million sterling of the Gold Refunding bonds, it is understood that the International Bank of Costa Rica holds £332,800 of the bonds on account of the Costa Rican government.

BANKING.

The principal banks operating in Costa Rica are:

Banco Anglo-Costarricense. Main office at San José. Established in 1863. Capital, paid up, 1,200,000 colones. Reserve fund, 1,016,000 colones.

Banco Commercial de Costa Rica. Main office at San José. Bankrupt, February, 1915.

Banco de Costa Rica. Main office at San José. Established in 1887. Capital, 200,000 colones.

Banco Internacional de Costa Rica. Established in 1914. Authorized issued capital, up to 4,000,000 colones (guaranteed by the government.)

A law was passed on October 26, 1896 for the adoption of the gold standard, the monetary unit to be the gold colon (valued about 46 cents American money). The new silver coinage consists of fractions of the colon, namely, 50, 25, 10, and 5-cent

pieces, which are legal tender up to 10 colones, copper being legal tender up to 1 colon. Foreign gold is legal but not foreign silver.

An executive decree of March 7, 1918, fixed the value of the colon in the customhouse of Costa Rica at 46½ cents American money.

The banking law has been modified so as to require banks, branches of foreign banks, or institutions making loans, receiving deposits, buying and selling exchange, coins and other moneys, engaging in commission and discount operations, to pay three-fourths of 1 per cent. of the total annual receipts of interests, discounts, commissions, exchange profits, returns from loans on objects of value, and any other receipts in the nature of profits.

According to the banking law of August 7, 1918, all banks, branches of foreign banks, or banking houses established in the country and which receive deposits on account current, must publish in the official gazette monthly, or at such periods as the treasury department may indicate, a statement of cash on hand approved by a supervisor appointed by said department.

At a general meeting of the stockholders of the Crédito Agrícola de Cartago held in February, 1919, it was voted to increase the aggregate capital of the bank from 100,000 to 200,000 colones.

The National Bank of Costa Rica has been authorized to issue 8,998 bank bills of the denomination of 100 colones each.

The Executive Power has authorized the International Bank of Costa Rica to issue 1,000,000 colones in bank bills, which amount is the first installment of the sum authorized under the law of October 5, 1918.

Banking Holidays.

January 1, New Year's Day; March 19, San José (St. Joseph); April 11, Battle of Rivas; April 1, Holy Thursday; April 2, Good Friday; April 3, Holy Saturday; May 1, Surrender of General Walker; June 3, Corpus Christi; July 14, Fall of the Bastille; July 24, Birthday of Simon Bolívar; August 15, Assumption; September 15, Anniversary of Independence; October 12, Discovery of America; December 8, Immaculate Conception; December 25, Christmas Day. December 29, 30 and 31 are bank holidays.

RAILWAYS.

There are nearly 400 miles of railways in Costa Rica, which connects San José with the Atlantic port, and which have been extended to connect the capital with the Pacific port. The San José line to Limón is 104 miles long, and is called Costa Rica railway. And the San José to Punta Arenas line is 76 miles and is State owned. Only a short distance now divides the two terminals of the two railways belonging to the United Fruit Company.

There is an electric tramway of 8 1-3 miles at San José.

The receipts of the Pacific Railway in 1918 were 894,072 colones, and the cost of exploitation 700,808 colones, leaving net receipts of 193,264 colones in favor of the Government treasury, as against 76,869 of the preceding year.

POSTS AND TELEGRAPHS.

There are 208 post-offices; 15,170 miles of telegraph wires, and 147 telegraph offices.

The total length of telephone lines is about 640 miles.

Wireless telegraphy is working from Limón to Bocas del Toro (Panama), a distance of 60 miles, and to Bluefields, in Nicaragua, and to Colón, in the Panama Republic. Limón has a radius of 300 miles.

The Government has ordered a high-power radio telegraph station from the United States.

PRINCIPAL DEALERS.

The following is a list of the principal dealers in Costa Rica:

SAN JOSE

Importers and Exporters.

F. Alvarado y Co.—Assman y Co.—Basigo y Alvarado.—E. de Benedictis.—Eduardo Bengoechea.—A. Bresciani.—Rafael Casañas y Co.—J. E. Clark y Co.—A. Esquivel.—J. Esquivel.

Glassware.

José C. Apuy y Co., Calle Central Norte.—A. Asch y Brother, Av. Central.—A. Leiva y Co.—Juan Rafael Mata, Av. 2a. Oeste y Calle 2a. Sur.

Leather Goods.

José M. Castillo.—Gabriel Coronado, Mercado.—Carlos L. Rodríguez, Guadalupe.—Gabriel Vargas, Mercado.

Druggists.

Ramón Agulla, Rojas G.—Alberto Ardains, La Universal.—Hnos. Astorga, Española.—E. Balma y Corveti, De Paris.—D. Carranza, Occidental.—Herman Zeledon, Francesa.—F. Jimenez Nufiez, La Oriental.—Elias Rojas, Dolorosa.—Ramón Rojas Gomez, El Agulla.

Hardware.

Fortich Espriella y Co.—Guillermo R. Lahmann.—Miguel Macaya y Co.—José Pablo Rodríguez y Hno.—Gabriel Vargas y Co.

Jewellers.

A. Chappate.—Ricardo García Lopez.—E. Velazquez y Co., El Iris.—C. Lopez García, Correo 318.—Francisco Muller.—R. Ortiz F. e hijo.

Toys.

A. Asch Bros.—José Esquivel.—Hnos. Herrero.—A. Herrero y Co.—A. Leiva y Co.—J. R. Mata.—Manuel Romero.—Miguel Tunell.

Books.

L. M. Castro y Co.—Falcó y Zeledon, 7a. Av. Este 247.—Hnos. Flejas.—Antonio Font.—Antonio Lhemann, Av. Central.—M. Vda.

de Linares, Av. Central del Este 42.—Marlar de Line.—J. J. Montero, Av. Central.—Pauter y Co., Av. Central.—P. A. Sautex y Co.

Furniture.

M. Antillon, Calle 21 Norte.—J. Araya, Av. 12 Oeste.—J. M. Artavia, Av. 5a. Oeste.—Emilio Banchsi.—Fernando Hernandez.—J. Marin, Calle 20 Sur.—Mendez Chavez y Co.—J. Morales Bejerano, Av. Central.—Martin y Sarratea, calle 15 Norte.—J. Murillo, Av. 6a. Este.

Ready-made Clothes.

José Esquivel, Av. Central Oeste.—Epifanio Granados, Av. Central Oeste.—Herrero y Gil.—Manuel Madrigal Q.—Ricardo Muñoz M. calle 3a. Sur.—Hnos. Robert, Calle Central Norte.—Gabriel Vargas, Av. Central Oeste.

Tailors.

J. Alleyne Belgrane.—Gonzalo Artavia.—Biguel Borrás.—Alberto T. Brenes.—Gregorio Expósito.—Herrero y Gil.—Vicente Montero.—Salvador Umaña.—Juan W. Velenzuela.—Marcelo Vechi.

Hats.

Francisco Antillon, Av. Central Oeste.—F. Aymerich.—Pedro Camprubi, Calle Central Sur.—Roberto Maroto B.—Manuel F. Palomo.—Felix Perez.—Tomas Valverde y Co., 1a. Av. Oeste.—Manuel Veiga Lopez, Av. Central Oeste.—Hnos. Robert, Calle Central Norte.—José Esquivel Saenz, Av. Central Oeste.

Milliners.

José M. Alvarado.—Elena Calvo, Av. Central Este.—Carranza y Montealegre, Calle 3a. Norte.—La Gran Señora, Calle Central Sur.—Hnos. Herrero.—La Margarita, Av. Central Este.—Calixto Madrigal H. Mercado.—Enriqueta Pinto, Av. Central Este.—Agustín Salas.—Mercedes Salazar de Millet, Av. Central Oeste.

Texture.

T. Assmann y Co., Av. Central.—Basigo y Alvarado, Av. Central.—Rafael Cañan y Co., La Mascota, Av. Central.—A. Herrero y Co., Siglo Nuevo, Av. Central.—Edgard Knohr y Co., Av. Central.—J. Knohr e hijos, Av. Central.—E. Pajes y Co., La Athambra, calle 20 Sur.—Hnos. Pajes, Ambos Mundos, Av. 3a. del Este.—W. Steinworth y Hno., Av. Central.

Shoes.

José Araujo.—Enrique Benavides.—Bertheau y Co., Av. 3a. Este.—Elias Calderon G., Av. Central Oeste.—M. V. de Carboni, calle 6a. Norte.—Alberto Carrillo, Calle 8 Norte.—Joaquín Cordero, calle 8a. Sur.—Hnos. Del Olmo, Fabrica Nacional de Calzado.—Rafael Franco, Calle 6a. Sur.

PUERTO LIMON.

Importers and Exporters.

John F. Allen.—S. Amador.—José Arraste.—Asch Bros.—Jesus Baldares.—Andrés Borzone.—Bredy Cousins.—M. Brenes.—M. Cespede.—Simons Cohu.—S. Darce.—Desporte y Co.—R. Deut.—Solomon Desna.—Esquivel y Canas.—A. Fais.—José Fan Lion.—Mateo Franchisch.—Morris Fred.—P. H. Juliao.—N. A. Juriedini.—N. G. Juriedini.—N. y N. Juriedini y Co.—José Lago.—Isaac C. Lean.—Juan F. Leon.—Maduro y Sons.—Pascual Pandolfi.—Pardo y Roig.—B. Ramirez R.—Teodoro Rodriguez.—Siciliano y Co.—The White Store.—P. Thos.—United Fruit Co.—A. Vilaro.

FOREIGN INVESTMENTS.

The largest and most important concern that has invested in Costa Rica is the United Fruit Co. That Company stated the book cost of its properties in the Republic, as of September 30, 1917, to be \$12,851,897, a sum larger than that invested in any other of the tropical countries. Lands owned were carried at a book value of \$6,855,863, houses and buildings at \$738,073, railways at \$2,840,268, cultivations at \$1,148,627, etc. The acreage improved and unimproved was as follows: Improved, 38,196 owned and 921 leased; unimproved, 202,304 owned and 4,360 leased; total, 240,500 owned and 5,281 leased. The 39,117 acres under cultivation were devoted to the following crops: 24,914 to bananas, 7,495 to cacao, 652 to coconuts, and 107 to pineapples, the remainder being mostly used for pasturage. A total of 2,737 cattle and 1,650 other animals were owned.

The Costa Rican Manganese & Mining Co., of Delaware, is planning to carry on extensive mining operations in this field.

The principal mineral is gold and the principal mining fields are those of Abangarez, La Unión, Aguacate, and Montezuma.

The Abangarez Gold Fields of Costa Rica was incorporated in 1899 and acquired various mining properties in the Republic, including those of the Guanacaste Syndicate, the Guacimal Exploration Co., and the Costa Rica Esperanza Mining Co. A power plant, a mill, an aerial tramway, etc., are owned on the Guacimal River.

As of May 1, 1915, the company, which is largely controlled by interests identified with the United Fruit Co., entered into an agreement with Mr. J. M. Popham by which the latter undertook to operate the property on a basis of 10 per cent. of the net profits over and above operating expenses and the cost of current development work necessary to open up new ore reserves.

The capitalization of the company, as of December 31, 1916, consisted of \$3,880,000 common stock, \$1,000,000 preferred stock, 6 per cent. cumulative, and two issues of 6 per cent. notes, \$374,000 and \$476,000, respectively, which matured May 1, 1916, and the principal of which was not paid off until August, 1917.

Taken as a whole, Costa Rica might be spoken of as an attractive field for investment. The country, away from the railways, is little developed, and in many parts is wonderfully fertile. Great Britain and the United States have the largest investments at stake, Great Britain holding approximately \$8,000,000 Government bonds, as well as shares and debentures of the Costa Rica Railway, the Costa Rica Electric Light & Tramway Co., Costa Rica Markets, etc. The United States has invested in the field a sum probably about equal to that which Great Britain has placed there. The United Fruit Co., is, of course, the principal American concern. There is also considerable American capital in mining and other enterprises. American interests have \$20,000,000 at stake in the Republic. France owns about \$7,000,000 bonds and presumably has some minor investments. Germany is thought to possess about \$1,500,000 of the Government bonds and has placed sums in the coffee industry. Presumably most of the other capital has been raised locally.

CUBA.

Cuba is the largest and richest of the West Indies or Antilles. It is about the size of Pennsylvania, but not as thickly populated. As a country, however, Cuba is among the most thickly populated in America, being third after Haiti and Salvador.

The area and population, and political division in provinces, according to the enumeration made in November, 1916, are:

Provinces	Area in sq. miles	Population	Population per sq. mile
Havana	3,174	688,057	216.77
Pinar del Rio	5,212	269,166	51.67
Matanzas	3,260	280,353	85.99
Santa Clara	8,266	595,229	72.
Camaguey	10,076	193,201	18.87
Oriente	14,227	604,530	42.40
Total	44,215	2,527,536	59.65

The principal cities, with their population in 1916, are: Havana, 351,250; Santiago, 63,041; Matanzas, 56,568; Cienfuegos, 82,092; Camaguey, 93,057; Cardenas, 32,513; Santa Clara, 57,767; Sancti Spiritus, 58,845; Guantanamo, 60,216; Pinar del Rio, 52,472; Manzanillo, 62,485.

The population of the municipality of Havana, according to a recent census taken of that place, is 360,517 inhabitants.

In the fiscal year 1917-18 the immigrants entering the Republic of Cuba numbered 54,857, as compared with 59,191 during the previous year.

POLITICAL ORGANIZATION.

The Government of Cuba is a Republican. There are a President and Vice-President, who serve a term of four years. A cabinet of nine members appointed by the President is as follows: Secretary of State, Secretary of Treasury, Secretary of Justice, Secretary of the Interior, Secretary of Public Works, Secretary of Public Instruction, Secretary of Agriculture, Commerce and Labor, Secretary of Sanitation, and Secretary of the Presidencia or Executive Department.

The Senate consists of 24 members, four from each of the provinces, elected for a term of eight years, one-half of the number being elected every four years. The Vice-President is the presiding officer, but to provide for contingencies, the Senate also elects one of its members as president, and he is considered the leader of the body, especially in the absence of the Vice-

President. The members of the provincial council and the senatorial electors, named at the elections prior to the expiration of the senatorial terms, elect the members of the Senate. In each province the electors number 16, one-half of whom must be selected from the list of largest tax-payers, the other half also being men of prominence and position. These with the eight council-men make the body of 24 which names the senators.

The House of Representatives has 91 members, the basis being one representative for each 25,000 inhabitants, or fraction of over one-half that number. The members of the House are elected by direct vote of the people, for terms of four years, one-half of the body being selected every two years. Each of the six provinces has a governor, who resides in the capital of the province, and is elected for a term of four years.

A council of eight members who serve four years, assist the governors in the administration of the affairs of the province. Four are elected every two years.

The increase in population of the provinces of Matanzas, Santa Clara, Camaguey, Pinar del Rio, and Oriente entitles these provinces to additional congressmen in the House of Representatives as follows: Matanzas and Camaguey, 1 each; Pinar del Rio, 2; and Santa Clara and Oriente, 3 each.

The Republic of Cuba has 103 municipal districts, each governed by a Mayor and a council consisting of from 5 to 25 members, according to the population. The Mayors and Councilmen are elected for a term of four years, one-half of the council being by direct vote of the people every two years.

The new presidential election is scheduled for this year.

On August 8, 1919, the new electoral code went into effect, repealing the electoral law of September 11, 1908. This law was prepared with the assistance of Brig. Gen. Crowder, of the U. S. Army. This law makes all Cuban men over 21 years of age, listed in the electoral register, with the exception of inmates of asylums, persons legally declared incompetent, persons deprived of citizenship on account of crime, and members of the army and navy in active service, electors. The new code applies to electoral committees. There shall be a central electoral committee, provincial electoral committees, municipal committees, and electoral executive boards, the first three named being permanent. The central electoral committee shall be composed of a member of the supreme court, a magistrate of the Audiencia of Habana, a professor of the law school of the University of Habana, and a political member chosen by each duly organized national party. The electoral executive boards shall be composed of a president, two members, and the political representatives of the accredited national parties.

The 11th of July, 1919, the President sanctioned the census law recently passed by Congress. By this law was created a national committee of the census headed by a magistrate of the Civil Supreme Court, to be chosen by secret ballot of this body, a professor of the university, and an engineer chosen by the Society of Engineers.

A law promulgated by the President of the Republic on Jan-

uary 18, 1919 last repealed the law of August 3, 1918, establishing compulsory military service.

PERSONNEL OF THE GOVERNMENT.

General Mario García Menocal, President of Cuba took office May 20, 1913, reinaugurated May 20, 1917.

General Emilio Núñez, Vice-President of Cuba, took office May 20, 1917, at the close of a term as Secretary of Agriculture, Commerce and Labor, in the first cabinet of President Menocal.

MINERAL WEALTH.

In the early part of the 19th century the presence of enormous deposits of iron ore was known in the mountain districts of Oriente.

Nearly all of the great iron deposits of Oriente lie within a few feet of the surface, and on the southern slopes of the Sierra Maestra, it is necessary only to scrape the dirt from the side of the hills, take out the ore and send it down to the sea coast by gravity. Similar conditions exist at the Mayarí mines on the north coast, just back of Nipe Bay, where the deposits need nothing but washing with cold water. The soil being thus removed at little cost, the iron is ready for shipment to the smelters of the United States.

In spite of the fact that this ore was found to be equal to the best Swedish, and that nature, in her own laboratories, has supplied the requisite amount of nickel and manganese, making these mines most valuable but little attention has been paid to this marvellously rich source of minerals beyond those few who of the Spanish American Iron Company's holdings at Daiquirí, for \$32,000,000 however, has called the attention of mining interests in New York to the fact that millions of tons of untouched ore, still lie in the eastern provinces. Twenty-five per cent of the area of Oriente contains deposits of ore, mostly iron and manganese, and awaits only the necessary capital to place it on the markets of the world.

Valuable deposits of iron ore have been located from time to time in the western end of the Island, but usually the problem of transportation to the coast has discouraged mining in that locality. As a result of the present demand for copper, rumors of old abandoned mines in the Province of Pinar del Río have recalled the fact that many years ago, a century or more, early Spanish prospectors, poking over the hills, frequently found small outcroppings of copper, and in some cases sunk shafts for short distances, removed the ore and conveyed it to the coast on mule-back.

Cuba is another of the Latin American countries which is sending considerable quantities of copper to the manufacturing world. The most important mines are operated near Santiago. Including copper, iron, and gold, the export figures given in value for the last three fiscal years range from \$3,798,000 to \$12,039,000, each year showing a greater output.

A number of companies have been organized for the purpose of developing supposed oil fields on Cuba. Various questions are arising as to the securing of concessions and as to what has been actually accomplished in the search for petroleum in Cuba.

How Concessions are Obtained.

Under Cuban law, oil and mineral products lying below the immediate surface do not belong to the owner of the land itself but remain the property of the State. Concessions to develop possible oil fields in Cuba are granted freely to foreigners and to Cubans on the same terms. The charges made for concessions are fixed by law and are set forth in certain tables forming a part of the law, the charges depending upon the area included in the concession.

The owner of the surface has no share in the profits of the enterprise, though he is entitled to damages when injury is done to the surface or to buildings or other structures thereon. The time required in securing a concession depends somewhat upon the location of the land in question, its size, the work of survey, etc.

The number of petroleum concessions granted in Cuba up to 1918 was 88, including a total of 17,595 hectares. Of these concessions, 35 were in the Province of Habana, the smallest of the six Provinces of Cuba which thus far led in prospecting for oil.

It is said that approximately 20 oil wells have up to this time been completed in Cuba of which only four or five are producing in what can be called paying quantities, and in these cases the actual yield is not large.

It is impossible at present to state whether the petroleum resources of Cuba are important. Although exploitation has been going on for several years without proof as yet of oil deposits of commercial importance, there are people who believe that wells drilled to considerably greater depth will show valuable deposits. The organizing of companies and selling of stocks seems to have largely subsided.

There is no evidence of opposition to foreign capital employed in searching for oil in Cuba. On the contrary, in this as in sugar production and other industries foreign capital is understood to be welcome.

In September, 1919, a company was formed in Habana to develop the asphalt deposits and oil fields known as "La Central" and "Egipto," on the Properties and Santa Lugarda and San Antonio in the Province of Santa Clara. These mines comprise 199 claims—188 hectares belonging to the former and 90 to the latter.

The Cuban Petroleum Co., of Vuelta Abajo, which possesses a great number of petroleum claims in the Province of Pinar del Río, has been recently organized at Habana.

MINING LAWS.

Instead of "staking a claim" to a mining property in Cuba, they "denounce" it. In other words, a prospector makes a

drawing in duplicate in which he starts from a given center and goes so many meters east, so many south, west and north, until he completes either a square, parallelogram, or rectangular figure, after which an estimate is made of the number of hectares included in said drawing.

With this drawing, and a sufficient amount of cash to pay \$2.00 for each hectare, he calls at the Department of Agriculture and registers his claim, pays his money and gets a receipt, signed and sealed by the Government, with the date and even the hour attached. After this claim or "denouncement" is registered, he is entitled to everything that lies below what is termed the agricultural surface of the ground, for all time to come.

If the owner of said property protests against the miner digging or boring for copper, asphalt, oil or any other product lying beneath the surface, the claimant to the mineral rights must adjust his affairs amicably with the owner of the surface possible. If not, he has the right to either buy the property, lease it or work it, paying to said owner damages or a price that, if not mutually agreed on, is determined by a board of appraisers.

The usual custom, however, is to arrange with the owner, whenever possible, to accept a small royalty on whatever ore or oil may be removed from below the surface, this agreement being acknowledged before a notary public and registered in the nearest municipality. These rules and regulations in Cuba have proved as a ruly satisfactory in mining operations.

SUGAR.

For approximately half a century, cane—commercially speaking—has been King of Cuba, and during the last few years this moneyed-monarch of the Island Republic has received a new crown, a very rich one.

Owing to the advantages which climate, soil, rainfall and location contribute to cane growing in Cuba, the sugar industry, even when prices are low, has always managed to more than hold its own in competition with other parts of the world.

The value of Cuba's sugar crop forms an accurate index to her commercial prosperity. The average annual value for some years has been \$165,000,000.00. The first year of the war in Europe raised this figure to \$204,000,000.00.

There is no one industry in any of the Latin-American countries that yields anything like this sum for export to foreign countries, and when one considers that the area of Cuba is only 47,000 square miles, and that her population is only 2,500,000, some conception can be formed of the importance of the sugar industry to Cuba. If the money derived from this one source of wealth could be equally distributed among her people, every man, woman and child in the Island would receive as his share of the annual returns from the growth of cane, the sum of \$100.00.

In no part of the world, perhaps, is there greater evidence of activity along nearly all lines, than is found in the city of Havana today, and the capital, of course, is the financial heart of the Republic.

Many estates within the past year have given a return that more than equals the full value of the place; lands, improvements and everything pertaining to it. Hence one can understand the statement that all Cuba has gone "cane crazy" within the last years.

Methods Adopted.

Very few if any sugar estates in Cuba attempt to raise all of their own cane. Such an enormous tonnage is required to keep these great million dollar mills going day and night, for a period that may run anywhere from six to eight months, and sometimes even twelve, that only through the assistance of "colonias," or farms with an area of from five hundred to one thousand acres each, can the tremendous capacity of these mills be supplied.

The "Colono" or farmer who grows cane on shares is expected to have a capital of at least \$5,000. By offering this sum as a guarantee of good faith, the mill will loan him, if he desires, from three to four times the amount that he invests, and with this combined capital of farmer and mill owner, the farmer is enabled to buy oxen, or traction engines with which to plow his fields, men to plant the cane and cultivate it, laborers who cut, strip and pile it; carts, each frequently with six or eight yoke of oxen to haul it to the mill, and all other expenses for material and labor incidental to planting, cultivating and gathering the enormous crop from the thousand-acre field.

Accurate records are kept of the weight of the cane delivered to the mill by each "colono" and he is given, for each one hundred pounds of cane delivered, a certain number of pounds of sugar agreed upon by contract at the beginning of the year. His profits come from the sale of this sugar at the prevailing price of the commodity in the open market of the world. Thus it is that the cane growers share in the industry, and profit in accordance with the price paid for the finished product or raw sugar.

Cost of Production.

The following is an estimate of the cost of converting 100 acres of grass land into a sugar cane field, together with the profits derived from same during a period of two years. One hundred acres has been selected as a convenient unit on which to base an estimate for any number of acres desired.

The converting of 100 acres of grass land into sugar cane, together with profits derived from same during a period of two years:

Cost of plowing, planting and cultivating, 1st year, \$2,400.00;
cost of cutting 240,000 arrobas (25 lbs. to the arroba), \$2,400.00
cost of hauling to mill \$1,200.00; incidentals per 100 acres,
\$1,200.00.—Total, \$7,200.00.

Yield of cane per 100 acres, 240,000 arrobas. Amount of sugar received in exchange for said cane at the rate of 6 arrobas for each 100 arrobas of cane, 14,400 arrobas.

14,400 arrobas—360,000 lbs. of sugar, arroba 4c., \$14,400.00; expense of planting, cultivating and delivering same, 1st year, \$7,200.00; profit per 100 acres, \$7,200.00.
Net returns per acre, \$72.00.

SECOND YEAR

Cost of cleaning, \$1,000.00; cost of cutting 100 acres of cane, \$2,400.00; cost of hauling to mill, \$1,200.00; incidentals, \$5,200.00.

Gross returns on 1,000 acres, \$144,000.00; gross expenses on 1,000 acres, \$52,000.00; net profit on 1,000 acres, \$92,000.00; net returns per acre, \$92.00.

In the total profits, drawn at the conclusion, 1,000 acres are taken since the latter represents the usual size of a "colonia" or farm contributory to a large sugar central or "ingenio".

Cane lands in large tracts, located in the eastern part of the island, can be purchased at prices ranging at from \$15.00 to \$50.00 per acre. The cost of clearing these lands will average about \$15.00 per acre.

These estimates are based on normal prices, which now are larger; but the market price of the product has increased in the same proportion.

The approximate result in currency of the 1917-18 sugar crop, was \$370,101,837.35, 3,473,184 tons of sugar having been sold at the rate of 4.60c. per lb., making \$357,876,879.36 and 174,642,257 gallons of molasses at 7c. gallon making \$12,224,957.99.

The production of sugar in Cuba in 1916-17 was, in round numbers, 3,000,000. The proportional increase per province in 1917-1918 was as follows: Pinar del Río, 4.79 per cent.; La Habana, 10.18 per cent.; Matanzas, 9.20 per cent.; Santa Clara, 6.79 per cent.; Camagüey, 44.88 per cent., and Oriente, 24.16 per cent.

During the year 1918-19 the sugar cane ground in Cuba amounted to 37,000,000 tons, with a product of 4,100,000 tons of sugar, as against 31,413,710 tons of cane and a product of 3,533,090 tons of sugar in the previous year of 1917-18. This shows an increase in the past year of 566,910 tons in the production of sugar.

By the end of February 1919, 92 sugar mills were running at capacity rates and 979,200 metric tons of sugar had been received at port cities and 512,120 tons had been exported.

The crop of 1918-19 was as follows:

Provinces	Cane ground Arrobas	Sugar Tons	Molasses Gallons	Percent- age
P. del Río	86,250,809	102,146	5,280,271	10.30
Habana	311,890,991	389,864	16,881,657	10.87
Matanzas	616,470,010	743,028	71,333,365	10.29
Santa Clara	792,781,729	979,198	46,580,631	10.86
Camaguey	625,998,638	785,209	39,960,643	11.04
Oriente	798,545,157	1,010,292	48,047,112	11.18
Total	3,231,937,234	4,009,737	227,083,679	10.76

The following table shows the sugar crops, in tons, the average price of the pound of sugar produced and the total value of the sugar produced, during the last twenty years:

Year	Sugar Tons	Average price	Total value in American Dollars
1900	300,073	2.83	19,022,227
1901	635,856	2.29	30,132,727
1902	850,181	1.83	34,850,618
1903	998,873	1.96	43,515,495
1904	1,040,228	2.61	60,815,889
1905	1,163,258	2.79	72,698,971
1906	1,178,749	2.12	55,976,431
1907	1,427,673	2.23	71,315,212
1908	961,958	2.56	55,162,519
1909	1,513,562	2.52	85,437,545
1910	1,804,949	2.72	109,935,375
1911	1,483,451	3.02	100,352,486
1912	1,895,984	2.61	110,846,807
1913	2,428,537	1.95	106,078,496
1914	2,597,732	2.64	153,619,479
1915	2,608,914	3.31	191,435,319
1916	3,034,272	4.37	297,014,233
1917	3,054,997	4.62	316,189,191
1918	3,473,184	4.24	329,869,114
1919	4,009,734	5.06	454,479,846

The crop of 1918-19 was handled by 196 sugar mills or "centrales" distributed in the six provinces of the island. There was an increase of 22 mills in the number of those which were in operation, as compared with the previous year.

Of the mills now in operation, 72 are Cuban; 56, American; 36 owned by Spaniards, 4 by British, 3 by French, 2 by Swiss, and one by Italians.

A new sugar factory is being installed in the Province of Oriente, between Cristo and Songo, with an estimated output of from 50,000 to 60,000 tons. This factory is to be supplied from cane grown on 100 caballerias of land.

In Cienfuegos a company called the Cienfuegos Mollasses & Fuel Co. (Compañía de Mieles y Combustibles de Cienfuegos), has been organized with an aggregate capital of \$550,000. The company exploits mollasses, its exportation, and the manufacture of products in which it is a prime element. The company has issued bonds to the value of \$450,000.

An association of sugar plantation owners and cultivators, known as the "Asociación de Hacendados y Colonos de Cuba," has been formed in Habana. At a recent general meeting of the association opinion was almost unanimous that the association should oppose the proposed scheme of placing the sale of the entire coming sugar crop of Cuba in the hands of a commission and should insist on the right of each sugar producer to sell his crop in the open market.

Several sugar factories are preparing to install oil-burning engines during the off season, and figure on considerable saving, since coal is much more expensive than oil.

In view of the establishment at Antilla of a fuel oil station by The Texas Co., the United Fruit Co. has undertaken the creation of fuel oil tanks on its properties at Banes and Preston,

Oriente Province, Cuba. Six tanks will be created at present by an American construction company.

Three tanks will be erected on each division of the property. On the Banes division two tanks of 20,000 barrels capacity each will be erected at Macabi where Central Boston, the sugar mill, is located. On the Preston division two tanks of 20,000 barrels capacity each will be erected near Central Preston, the sugar mill, and a third tank, of 5,000 barrels capacity, will be located at Guaro, 10 miles from Preston on the company's narrow-gauge railroad.

These two sugar mills of the United Fruit Co. are perhaps the first in the district to substitute oil as fuel in place of the coal, wood, and cane waste formerly used.

The sugar industry is being rapidly concentrated in the hands of large syndicates and companies of which the Central Cuba Sugar Co., the Compañía Azucarera Ciego de Avila, the Compañía Azucarera de Altamira, the Compañía Azucarera de Güines, the Compañía Azucarera Pedro Fernández Castro, the Steward Sugar Co., the Compañía Central Aguedita, the Compañía Central Mercedes, the Constancia Sugar Co., the Federal Sugar Refining Co., the Dos Hermanas Sugar Co., the La Vega Sugar Co., the Manati Sugar Co., the Mercedita Sugar Co., the North American Sugar Co., the Parque Alto Sugar Co., the West India Sugar Co., are among the most important.

The following are other companies engaged in the development of Cuban natural resources:

Cuba Company, Incorporated in New Jersey in 1900. Main office, 52 William St., New York. Capital, authorized \$16,000,000; issued, \$10,500,000. Owns \$10,000,000 common stock of the Cuba Railroad Co.; 300,000 acres of land in Cuba and various town sites, including the terminal city of Antilla; sugar mills and plantations in the provinces of Camagüey and Oriente.

Central Cuba Sugar Co., Incorporated in New York in 1911.

Cuban-American Sugar Co. Incorporated in New Jersey in 1906. Capital, authorized, \$20,000,000; issued, \$15,029,400. Owns 367,000 acres, 8 factories, 2 refineries, 336 miles railroads, brickyards houses, electric light and water supply plants etc. Office, 129 Front Street, New York.

La Maya Valley Land and Improvement Co. Incorporated in Maine in 1905. Owns about 60,000 acres of timber and cane.

New Trinidad Lake Asphalt Co., Ltd. Registered in London in 1887. Main office, 2 St. Helen's Place, London, E. C. Capital \$2,500,000. Owns 2,600 acres freehold land and exclusive right to remove asphalt from a pitch lake until 1930.

Santa Cecilia Sugar Co. Incorporated in Maine in 1904. Offices at Guantanamo, Cuba. Capital, authorized, \$2,500,000; issued, \$1,500,000. Annual production, 26,000,000 lbs.

Tuinucu Sugar Co. Incorporated in New York in 1891. Capital \$500,000. Owns 5,500 acres of sugar land.

The Havana Fruit Co. Incorporated in Havana in 1813. Capital, \$300,000 in shares of a nominal value of \$1,000 each.

The Cuba Cane Sugar Company, one of the largest, if not the largest, was recently authorized at general meeting to issue bonds to the amount of \$25,000,000. The proceeds were to be used in funding the company's debts which amounted at that time to \$18,000,000.

TOBACCO.

Up to the beginning of the war, the tobacco industry of Cuba, ranged in importance second only to that of sugar cane. The

annual value of the crop under normal circumstances is worth about thirty-two million dollars.

As a result however, of the practical prohibition on the part of England and France, and the cancelling of the customary orders sent in from other European countries, the export of tobacco, especially cigars, fell off more than 50%.

However, with the restoration of peace and the resumption of normal conditions, it is reasonable to believe that tobacco culture again will assume something like its original importance in the industries of the Republic, especially as Cuba has always been able to produce a grade of tobacco not equalled in any part of the world.

Tobacco, unlike sugar, seems to be dependent for its quality, largely on some peculiar chemical characteristic of soil not easily determined, hence it is that the production is localized, certain sections being given over entirely to tobacco, and yielding a product many times more valuable than that grown only a few miles distant.

The best tobacco is grown within a comparatively short radius of the city of Pinar del Río, in the central western section of the province. This tobacco, known as "Vuelta Abajo," is celebrated throughout the world and brings, together with the wrapper tobacco of the Tumbadero and Guayabal districts, the highest prices of any crop in Cuba. \$500.00 as the value of the product of an acre under normal conditions is quite common; \$1,000.00 is not unusual.

Tobacco known as "semi-vuelta," and other various local names, is grown throughout the province, especially on the Guane plains, in the valley of Viñales, and in "sumideros" or basins scattered throughout the mountains, as well as in the level country, that lies south of the range and east of the celebrated Vuelta Abajo."

The most important tobacco-growing district in the Province of Santa Clara is Manicaragua. The Manicaragua leaf is famous for its fine aroma, flexibility, and excellent burning qualities, which permit an advantageous mixing with a leaf of inferior quality.

The tobacco manufactured in Cuba in 1918 amounted to the value of \$33,829,627, the production consisting of 331,705,125 cigars, 341,803,660 boxes of cigarettes, and 378,426 pounds of cut tobacco.

The profits of the tobacco company known as the Habana Cigar & Tobacco Factories (Ltd.), of which the Henry Clay Co. and Bock & Co. form a part, amounted to \$280,000.

The Tobacco Crop in 1920 is estimated at \$50,000,000.

COFFEE AND CACAO.

The growing of coffee and cacao, for the homeseeker of moderate means, offers great number of inducements. First of all, coffee is most successfully grown on rolling lands, or hill-sides, where the air is pure, the shade grateful, the drinking water fine, and the climate, especially if located on the north coast of the Island, simply ideal.

In spite of its superiority and the demand for native coffee, less than 40% of the amount consumed, is grown in Cuba. Most of it is imported from Porto Rico and other parts of the world, and this, regardless of the fact that nearly all of the mountain sides, valleys and foot-hills belonging to the range that extends through Pinar del Río from Mantua in the west to Cabañas in the east, are admirably adapted to the cultivation of coffee, as also are the mountains of Trinidad and of Sancti Espiritu, in the Province of Santa Clara, the Sierra de Cubitas and La Najassa in Camagüey, and the Sierra Maestra range that skirts the full length of the southern shore of Oriente.

Unfortunately most of these lands are in large tracts, from 10,000 to 50,000 acres in extent, and held often by non-resident owners in Spain who, paying but little or no taxes, are reluctant to divide them.

Until the abolition of slavery in 1878, the growing of coffee was one of the chief industries of the Island, but with the consequent complete change of the labor system, and the profitable returns derived from sugar, coffee culture rapidly disappeared, and thousands of coffee plantations that once dotted the hills of Cuba, were abandoned.

The Government is anxious to foster the coffee industry, which was once a very important factor in the prosperity of the Island. The first protective duty was imposed by the American Government of Intervention in 1906, \$12.15 being collected for each 100 kilos (25 lbs.) of crude coffee if not imported from Porto Rico, that country paying only \$3.40. During the first years of the Cuban Republic this duty was increased to \$18.00 per hundred kilos, and later, 30% was added, making a total duty paid of \$23.40 on every 220 lbs. of coffee imported. Porto Rico, however, is favored with a reduction of 20% on the above amount by the reciprocity treaty, which reduces the duty.

The growing of cacao, from the bean of which chocolate is made, can be carried on very successfully in combination with coffee; since, while coffee does best on those hillsides and mountain slopes, where fruit trees and palms furnish a grateful and necessary shade, the cacao is adapted to the rich deep soil found in the valleys and ravines that lie between these slopes.

The variety most commonly grown in Cuba is known as Theobroma, and begins to bear the fourth year, where it should continue to yield for a half century.

The yield of cacao beans in Cuba varies from four to twelve pounds per tree, and they are worth on the market at the present time, about \$9.00 per hundred which would leave a profit conservatively estimated at \$100 per acre.

FRUITS.

Many varieties of citrus fruit are indigenous to Cuba. The orange tree is found growing wild in almost every forest of the Island. The lime, also, is found in more or less abundance, scattered over rocky hillsides. Almost everywhere in Cuba are found a few orange trees, whose fruit is gathered for home

consumption, but only with the coming of Americans has the growing of citrus fruit been undertaken as a commercial industry.

Homeseekers from Florida found the native oranges of the Island, all of which are called "Chinas" or Chinese oranges to distinguish them from the wild oranges of the woods, to be of peculiar sweetness, and superior quality to those grown either in Florida or California. The rich soils, requiring comparatively little fertilizer, were very promising, and with the beginning of the First Intervention, large tracts were planted by American colonies in every province of Cuba. Some of these, as in the Bahía Honda district, fifty miles west of Havana, cover hundreds of acres within one single enclosure.

Within a radius of fifty miles of the city of Havana, many beautiful groves are located but the crops are sold in the markets of the capital. This fruit brings in the local market from \$6.00 to \$15.00 per thousand, and yields a very satisfactory return.

The cultivation of grape fruit, not only in Cuba but in that section of Havana Province known as the Isle of Pines, has been very successful as far as the production of a high grade fruit is concerned. The trees are prolific and the crop never fails. Unfortunately grape fruit shipped from Cuba to the United States has not always found a profitable market, and there have been seasons when the crop became an absolute loss, since the demand abroad was not sufficient to pay for transportation to northern markets.

There are over 20,000 acres to-day in this Republic on which citrus fruit is grown. The total value of the estates is estimated at about fifteen million dollars, but with each year it becomes more apparent that the area of profitable citrus fruit culture will be limited to a radius within not more than 100 miles from some port whence frequent and regular shipments can be made to the United States. This is an essential feature in the citrus fruit industry.

Pineapples have been grown in Cuba for export since the beginning of the First Intervention, and to some extent even before. In point of money value, the industry ranks next to that of the citrus fruit. Most of the pineapples intended for export are grown within fifty miles of the city of Havana. Over a million crates are annually shipped to the United States.

Pineapples may be grown on any rich soil in Cuba and are considered one of the staple crops. The slips, or offshoots from the parent plant, are set out in long ridges some four feet apart with intervening spaces averaging a foot. These produce fruit in one year from planting and from each original stalk an average of six suckers may be taken for planting in other beds, so that with a very small start the acreage may be easily increased five or six fold each year.

About 8,000 plants are considered sufficient for an acre of ground; the cost of same when purchased averages about \$30 per acre while the preparation of the land for pineapple culture will amount to somewhat more. The returns, under

favorable circumstances, will vary from \$75 to \$100. The average net profit from pineapples grown near Artemisa and Campo Florido is said to be about \$50 per acre. The high price of sugar, since the beginning of the European war, however, caused much of the former pineapple acreage to be converted into cane fields.

One of the most abundant and delicious fruits in Cuba is the mango, which is found growing wild in the forests, especially in the hills of Bahía Honda, as well as in almost every yard or meadow of the Island.

With the advent of the American colonies in 1900, truck gardening sprang rapidly into prominence, until to-day, it forms quite an important part of the small-farmer's revenue. Most of the well known vegetables of the United States are grown in Cuba, not only for the local markets, but for shipment abroad. They are usually planted at the close of the rainy season in October or November and are brought to maturity in time to reach the North during the winter and early spring, when high prices prevail.

Those vegetables from which the best results have been obtained are sweet peppers, lima beans, okra, white squash, tomatoes, egg-plants, string beans and early potatoes.

A large area of land in Camagüey has been planted to castor beans in anticipation of producing raw material for the manufacture at that place of lubricating oil.

Wheat cultivation has been undertaken in the Province of Camagüey. The wheat sown is of the class known as buck-wheat.

A Havana firm has begun the importation of live stock from Central American. The first shipment, consisting of 1,001 head of stock from Costa Rica reached Havana during May, 1919.

The live stock in Cuba, according to latest figures obtainable, consists of 3,703,928 head of cattle, 720,040 horses, 53,264 mules and 2,882 donkeys.

Cuba has about 1,250,000 acres of forest lands belonging to the Government, besides some of private property. These lands contain valuable timber and hard cabinet woods, especially mahogany and cedar. The latter is used extensively in making cigar boxes.

INDUSTRIES.

Except for the manufacture of sugar, Cuba is not an industrial country. However, industrial development is coming now with very good prospects.

La Compañía Cubana de Zunchos y Gomas S. A., has completed a new building, next to its manufacturing plant, for the manufacture of rubber articles. The company will make surgeon's rubber gloves and other articles of national consumption.

On November 1st the Cuban Quartz Products Co. opened a new factory in Havana. The firm manufactures all kinds of glassware.

In Matanzas a company has been organized to start the manufacture of railroad cars to supply the needed rolling stock to Cuban railroads. The machinery for the factory will be of the most modern type, and imported from the United States.

An ice factory is being constructed on the outskirts of Havana in the town of Guanabacoa. The factory will have the most modern machinery and capacity for turning out 150 tons daily. The machinery will be imported from the United States.

A large factory for canned goods known as the "Criolla" has been started at Surgidero de Batabanó.

The firm of Amour & Co. is now installing a great packing plant in the cattle-raising coast region near Cayo Cruz for the preparation of meats and fish.

Although Cuba is not a large producer of alcohol at present, there is an opportunity to make this one of the leading industries of the island because of the large production of sugar. From the manufacture of a ton of sugar, 40 gallons of molasses, or miel, result; from the latter, 16 gallons of alcohol of the first quality can be produced.

Efforts are now being made to establish 10 plants, situated at convenient locations on the island, and fitted with the latest improved machinery. Large quantities of miel are shipped to the United States and other countries in tank steamers and tank cars. Before the war it sold as low as 2 cents a gallon, but since then the price has been as high as 10 cents a gallon.

Alcohol made from miel, after supplying local demand, is exported in considerable quantities.

A new distillery with a capital stock of \$95,000 has just been established in Havana. It is the intention of the company to open branches in several other cities of the Republic.

According to the figures of the board of fisheries of the department of agriculture, the amount of fish consumed in Havana, from June 1st, 1918, to June 30, 1919, was 11,761,253 pounds, representing a value of 1,941,863 pesos; adding to this the value of the shellfish, turtles, and mollusca, the total is 2,041,031 pesos. Compared with the figures of the previous year, a decrease of 138,276 pesos is shown in the consumption of fish for the year just given. In the same year 92,725 pounds of frozen hake, cod and mackerel were imported direct from New York for Havana hotels.

FOREIGN TRADE.

The foreign trade of Cuba is comparatively very high, and has been recovered from the unfavorable influence that it suffered at the beginning of the European war. The trade in the last four years was:

1915	Imports	\$155,448,233	Exports	\$254,291,763
1916	"	248,278,279	"	356,371,358
1917	"	272,573,005	"	366,845,510
1918	"	297,622,214	"	413,325,251

The Foreign Trade of 1918 was \$710,947,465, as against \$639,418,565 in 1917—an increase of \$71,528,900 in favor of

1918, of which increase \$25,049,159 worth of goods were imported and \$46,479,741 exported. The balance in favor of Cuba in 1918 was \$115,703,037 and \$94,272,455 in 1917. The bulk of the trade in both years was conducted with the United States, Great Britain, and Spain in the order named.

The foreign commerce of the fiscal year 1918-19 amounted to 794,242,578 pesos. Of this sum the importation was \$315,587,167 and the exportation \$477,221,863, while the re-exportation amounted to \$93,113.

Imports and exports of coin in 1917-18 amounted to \$5,622,978 and \$2,780,049, respectively. In the previous year these imports and exports were \$26,545,455 and \$24,708,200, respectively.

During the first seven months of 1919 the exports of sugar amounted to 19,477,100 bags, representing a total of 2,782,443 tons—a considerable increase over the output of the previous year. During the same period of 1918, 18,108,729 bags were exported, a total of 2,586,960 tons, while in 1917, the exports amounted to 18,477,970 bags, or 2,691,590 tons.

The exportation of leaf tobacco through the port of Havana from the 1st of January 1919 to the 30th of September amounted to 253,417 bales, weighing 10,983,733 kilos. Of this quantity 183,054 bales were consigned to the United States; 26,770 bales to Argentina; 11,491 to Spain; 7,632 to Switzerland; 5,260 to Canada; 4,098 to Uruguay, and the rest to other countries.

The value of Cuban exports to the Argentine Republic during the year 1917 amounted to \$3,220,726 gold, a sum greatly in excess of that of previous years.

Owing to the large number of cattle Cuba has been importing from Venezuela, Colombia, and other Central and South American points through the port of Manzanillo, the President has ordered the establishment of quarantine stations and the installation of cattle dips for imported cattle as a protection to the native stock.

A Presidential decree of August 27 repealed the law of October 29th of 1917 regulating the sale of sugar for local consumption; fixed the maximum sale price for sugar, raw, crystallized, and refined, and provided that the exportation of these sugars remain exempt from the terms of the decree and subject to the contract made by the Government of the Republic with the "United States Sugar Equalization Board (Inc.)," on October 24th, 1918, and the decrees and resolutions concerning the same.

TRADE WITH THE UNITED STATES.

The Cuban people are the best costumers of the United States. There is no other country in the world with a larger purchasing power per capita, actually expended in American goods. As an average, every Cuban bought in 1919 foreign goods to the amount of over \$150, and since the bulk, or over 80% of the foreign trade is with the United States, every Cuban bought over \$100 of American goods. No other people has such wonderful record.

The following list shows the principal articles of Cuban production that were imported in the United States in 1918:

Animals, \$2,831.—Art works, \$11,875.—Asphaltum and bitumen, crude, \$5,868.—Bones, hoofs, and horns, and manufactures of, \$47,748.—Brass, fit only for remanufacture, \$40,339.—Breadstuffs, \$2,207.—Cars, carriages, other vehicles, and parts of, \$416.—Chemicals, drugs, dyes, and medicines, \$211,181.—Cocoa, or cacao, crude, \$34,261.—Cocoa and chocolate, prepared, \$11,321.—Coffee, \$15,599.—Copper, and manufactures of, \$5,045,748.—Cotton and manufactures of, \$47,926.

Dyewoods, in a crude state, \$4,000.—Fertilizers, \$8,356.—Fibers, vegetable, and textile grasses, and manufactures of, \$258,246.—Fish, \$4,709.—Fruits and nuts, \$1,789,405.—Furs and manufactures of, \$25.—Glass and glassware, \$1,447.—Gold and silver sweepings, \$9,063.—Hair: horse and other animals, \$2,918.—Hats, bonnets, hoods, and materials for; Hats, bonnets, etc., of straw, chip, grass, etc., \$1,682.—Hides and skins (except fur skins) raw or uncured, \$2,379,347.—Hide cuttings, raw; and other glue stock, \$26,393.—Honey, \$438,872.

India Rubber, etc., and manufactures of, \$30,882.—Iron ore, \$1,953,884.—Iron and steel, and manufactures of, \$128,274.—Ivory, vegetable, \$7,722.—Leather and tanned skins, and manufactures of, \$2,432.—Manganese, oxide an dore of, \$1,479,314.—Meat and dairy products, \$7,955.—Oils, \$9,669.—Paper stock, crude (except wood pulp), \$10,125.—Paper, manufactures of, \$48,298.—Photographic goods, \$1,146.—Plants, trees, shrubs and vines, \$1,250.—Precious stones, \$11,036.

Seeds, \$4,744.—Shells, unmanufactured, \$58,389.—Soap, \$8,138.—Spirits, wines malt liquors, and other beverages, \$140,125.—Sponges, \$149,669.—Starch, \$3,741.—Sugar and molasses, \$227,846,190.—Tobacco, and manufactures of, \$18,966,005.—Vegetables, \$631,024.—Wax, \$69,247.—Wood, and manufactures of, \$402,686.—Zinc, block or pigs, and old, \$4,551.

The following American goods were imported by Cuba in 1918:

Abrasives, \$67,880.—Agricultural implements, \$868,319.—Aluminum, \$53,557.—Animals, \$1,293,005.—Art works, \$56,748.—Asbestos, manufactures, \$350,015.—Asphaltum, manufactures, \$56,512.—Athletic and sporting goods, \$94,908.

Babbit metal, \$62,674.—Billiard tables and accessories, \$18,973.—Blacking (including shoe paste, etc.), \$75,149.—Bones, hoofs and horns, unmanufactured, \$3,622.—Brass, and manufactures, \$713,397.—Breadstuffs, \$14,297,531.—Bronze, manufactures of, \$71,585.—Broom corn, \$256,356.—Brooms, \$13,009.—Brushes, \$131,610.—Buttons and parts of, \$111,491.

Candles, \$283,565.—Cars, automobiles, and other vehicles, \$8,864,675.—Celuloid, and manufactures of, \$45,812.—Cement, hydraulic, \$2,006,065.—Chemicals, drugs, dyes and medicines, \$5,423,758.—Chewing gum, \$37,510.—Clays, \$39,700.—Clocks and watches, \$187,060.—Coal and coke, \$8,411,065.—Coal tar, \$9,671.—Cocoa and chocolate, prepared or manufactured (not including confectionery), \$102,365.—Coffee, \$3,691,219.—Confectionery, \$161,612.—Copper and manufactures, \$1,206,817.—Cork, manufactures of, \$96,794.—Cotton manufactures, \$17,844,444.

Earthen, stone and china ware, \$879,115.—Eggs, \$2,793,746.—Egg yolks, etc., \$15,244.—Electrical machinery and appliances (except locomotives), \$3,366,700.—Explosives, \$660,240.

Feathers, \$20,364.—Fertilizers, \$3,217,865.—Fibers, vegetables, manufactures of, \$1,385,837.—Fire extinguishers, \$21,631.—Fish, \$2,207,813.—Flavoring extracts and fruit juices, \$79,710.—Fruits and nuts, \$1,794,703.—Furniture metal, \$641,206.—Furs and fur skins, \$16,842.

Glass and glassware, \$2,184,863.—Glucose, \$183,884.—Glue, \$149,431.—Gold and silver, manufactures of (including jewelry), \$97,442.—Grease, \$1,767,837.

Hats and material for, \$375,661.—Hay, \$360,642.—Hops, \$120,840.—Household and personal effects, \$102,101.

India rubber, manufactures of, \$2,377,884.—Ink, \$122,682.—Instruments and apparatus for scientific purposes, \$152,901.—Iron and steel, and manufactures, \$42,507,306.

Lamps, chandeliers, etc., (except electric), \$195,290.—Lead and manufactures, \$206,812.—Leather and manufactures, \$13,317,092.—Malt, \$745,976.—Matches, \$7,072.—Meat and dairy products, \$34,986,940.—Metal polish, \$19,710.—Metals, not otherwise classified, \$25,856.—Moss, \$5,924.—Motor boats, \$5,301.—Mucilage and paste, \$72,587.—Musical instruments, \$525,783.—Naval stores, \$339,582.—Nickel and manufactures, \$7,671.—Notions, not otherwise classified, \$83,135.—Nursery stock, \$23,942.—Oakum, \$27,563.—Oilcake and oilcake meal, \$77,799.—Oilcloth and linoleum, \$160,849.—Oils and manufactures, \$9,357,389.—Paper and manufactures, \$9,828,299.—Paraffin and paraffin wax, \$243,291.—Pencils (except slate), and pencil leads, \$133,987.—Penholders, \$5,990.—Pens, \$19,354.—Perfumeries, cosmetics, etc., \$295,141.—Phonographs, graphophones, etc., and records, and material for, \$602,412.—Plaster, builders and common, \$78,626.—Plated ware, except cutlery and jewelry, \$434,732.—Plates, electrotypes and stereotype, \$22,348.—Plumbago or graphite, and manufactures, \$32,941.—Refrigerators, \$73,924.—Roofing, felt, and similar materials, \$261,014.—Salt, \$436,008.—Seeds, \$28,108.—Shoe findings, \$34,206.—Silks, manufactures of, \$353,121.—Silk, artificial, manufactures of, \$87,857.—Soap, \$1,037,841.—Spices, \$31,968.—Spirits, wines, malt liquors, and other beverages, \$380,473.—Starch, \$312,941.—Stearin, vegetable, \$46,968.—Stone and manufactures, \$124,371.—Straw and palm leaf, and manufactures, \$397,698.—Sugar, refined, \$44,059.—Surgical appliances (not including instruments), \$314,547.—Suspenders and garters, \$152,361.—Tin, in pigs, bars, etc., \$3,224.—Tobacco, manufactures of, \$124,482.—Vegetables, \$7,942,414.—Vinegar, \$4,504.—Wall boards (substitute for plaster), \$77,210.—Wax, manufactures of, \$12,563.—Wood and manufactures, \$10,734,718.—Wool and manufactures, \$1,426,216.—Yeast, \$20,913.—Zinc and manufactures, \$26,630.

Cuba presents unusual opportunities for the sale of American jewelry, silverware, and kindred lines, according to a report by Trade Commissioner S. W. Rosenthal of the Bureau of Foreign and Domestic Commerce.

Cuban markets have been open to American manufacturers since the beginning of the war because of curtailed shipments of jewelry from the usual sources of supply. Germany has shipped nothing, and the jewelry from other European countries has been of inferior workmanship.

Although Cuba is a comparatively small country, with a population but slightly larger than that of the State of New Jersey, it is a good field for American manufacturers who are interested in foreign trade—first, because of its accessibility, Havana being within eight hours of Key West and within three days of New York; second, because it is a wealthy country; third, because it is developing rapidly. It is the logical place to start in Latin-American trade, because of the preferential rates of duty which American merchandise enjoys and the comparatively low cost of selling.

Cuba is primarily a market for solid-gold jewelry. There is a limited demand for gold-plated and gold-filled articles as well as for goods made of platinum, the latter being sold mostly in the large cities.

The West Indies absorb nearly a third of the total automobile exports from the United States of Latin-America, and Cuba, takes 84 per cent. of this West Indian trade. Large returns from sugar have made the Cuban planters prosperous, and they purchase not only motor trucks for use on their estates, but the

highest-priced passenger cars for pleasure driving. From the fiscal year 1913 to 1918 the value of American exports of motor vehicles and parts to Cuba multiplied 20 times.

In 1913 the number of automobiles of American makes imported in Cuba was: commercial, 14; passenger, 233; and the value of all automobiles, accessories, tires and motor cycles was \$323,578. In 1917, the number of machines reached a maximum. The automobiles imported in that year was very little under 4,000, and the total value of cars, parts tires, and motor cycles was \$5,109,730. In 1918, the number of machines decreased to 3,529, including commercial and passenger, but the total value increased to over six and a half million dollars. For the nine months ending March 31, 1919, the number of cars was: commercial, 456; passenger, 1,326, and the total value of cars, accessories, tires and motor cycles was 5,371,814.

Auto trucks are now very largely used for hauling near Havana, rapidly replacing the old-style drays and wagons for this purpose. There are a large number of the heavier American trucks, besides a general use of lighter trucks of different capacities in use in and about 1,000 and 1,500 trucks of different capacities in use in and about Havana in 1918, and almost an equal number in use in other parts of the island. These are largely owned by transportation companies, large wholesale dealers, plantations, etc., with a considerable number in possession of the smaller establishments for light delivery purposes. There has been some improvement recently in the highways, which is likely to continue; but the country roads as a rule are not adapted to auto-truck hauling, and in some cases are almost impassable in wet weather.

Eighty per cent. or more of the very fine furniture used in Havana is said to be manufactured in that country by Spanish cabinetmakers, the designs of the furniture corresponding to the special liking of the customer. Imports of the standard furniture are largely from the United States.

White enamel and gold furniture is popular. Birch wood is usually employed, is attractive, and well suited to the climate. So far, little solid oak furniture has been introduced, although it appears that the market could be developed to considerable extent.

With bedroom furniture wardrobes should, as a rule, be included, as closets are not ordinarily built in the Cuban houses.

Native furniture dealers sometimes state that American woods will not resist the attacks of insects found in Cuba, but it seems to have been sufficiently proven that good American hardwood furniture is practically immune, and gives as good service at that made from the native woods.

It is of much importance that sets of furniture be shipped complete and that they be carefully inspected before packing. Delayed shipments, missing parts, imperfect upholstering, and improper finishing cause dissatisfaction and retard this branch of trade.

The packing should be done in a way to take up as little space as possible, each box or case being numbered, the invoice showing the contents of the boxes, so it will not be necessary

for the importer to open each one to ascertain what it contains. This is particularly important in Havana, owing to the limited storage space of many of the importers.

Several important Havana firms carry stocks of well-known brands of steel office furniture, which is now extensively used throughout Cuba and is recognized as superior to anything else on the market, particularly since furniture of this type is immune to the ravages of worms, which attack articles of wood in this climate. The sale of steel furniture, however, is considerably retarded by the enormous prices asked for these goods. The average cost of an ordinary three-drawer metal filing cabinet has been in the neighborhood of \$65. For this reason most of the small provincial officers are equipped with desks, chairs, cabinets, from chests, etc., made from native hardwoods, such as mahogany and Spanish cedar, which cost considerably less than the metal equipment. At more favorable prices, the market would probably expand.

Cuba follows Mexico in the purchase of tractors from the United States, and in the first quarter of the 1919 fiscal year Cuba's imports of tractors exceeded those of any other Latin-American country. The tractors sent to the West Indies are used almost wholly on the sugar estates. The work of the plow drawn by tractors is found to be more uniform and much deeper than that of the oxen-drawn plow, and this better preparation of the soil more than compensates for the expense of the machine. Alcohol is often used as fuel in this section, though in other localities gasoline is available for the motors. The use of tractors is confined chiefly to the older cultivated lands in the Province of Havana, Matanzas, and Santa Clara.

The tractors used on the sugar estates of Cuba are of two kinds—the round wheel and the track-layer or caterpillar style, and are used almost exclusively for plowing. In the northern section of the Cienfuegos Province, owing to the hard, sticky, clayish soils, the caterpillar type seems to be the most successful, as it is claimed that in the use of round-wheel tractor there is a constant slipping of the wheels with the consequent loss of power and breakdowns. In the central and southern part of this district the round-wheel tractors seem the most successful, and they have been found to be very satisfactory and economical—more economical when alcohol is used instead of gasoline.

In the southern section tractors of 8 to 16 and 12 to 25 horsepower have been used to some extent for hauling purposes as well as in connection with the use of cane-planting machines. Several plantations are to experiment in the use of different kinds of tractors, and especially with the caterpillar type, for the purpose of hauling cane.

Cuba is the United States' best paint customer, except Canada, in the Western Hemisphere. The paint exports to Cuba are more than to all of the other Latin Republics of North America; they are 50 per cent. more than Argentina, the best customer in South America; they are more than to all the South American countries, excluding Argentina and Brazil. In 1913 exports to Cuba were valued at \$444,595; in 1918 they were almost four

times this amount, the total for that year being \$1,660,228. In the first half of the 1919 fiscal year exports of this commodity were more than half of the 1918 figures, indicating a continued increase.

The item of greatest value in this class of exports to Cuba is ready-mixed paints. For seven years Cuba has bought more in quantity, though their value is only a tenth of that of the American ready-mixed paint than has any other country in the world. The shipments of white lead to Cuba are slightly more than mixed paints. The exports of oxide of zinc to Cuba are also considerable, and the shipments of miscellaneous paints and colors amount to more than a third of the total. The 1919 export figures show a particularly large gain in dry colors, white lead, zinc, and other paint substances.

The textile and clothing demands of Cuba are for the most part the same as those of an equal area in the Central or South-Sentral States during the summer season. Frost is unknown on the island, with the result that cottons and light-weight are worn by both sexes, almost to the exclusion of woollens.

Trade in this branch can be said to be relatively well organized. Some well-known American concerns have agents stationed here, while others send salesmen regularly to this city, as they would to New Orleans or other cities of the Middle West. Many local concerns send their buyers to New York or to New England, just as is done by merchants of the United States.

The Cuban market for phonographs is excellent. Sales depend solely on prices, terms, and quality. Phonographs are selling in the local retail stores from \$5 to \$181. The most popular are those selling from \$20 to \$30.

THE CHAMBER OF COMMERCE.

The following officers were elected at the last general meeting of the Board of Directors of the Chamber of Commerce of Havana: President, Don Carlos de Zaldo; vice president, Don Sabás E. de Alvaré, Don Ernesto B. Calvo, and Don Carlos Arnoldson; treasurer, Don Charles C. Dufan; and general secretary, Don José Durán.

A Presidential decree of July 25th regulates the drug and medicine trade, providing that only legally licensed pharmacists or druggists established in the Republic having public or private offices, or connected with hospitals, infirmaries, clinics, or other establishments devoted to the care of the sick, shall be allowed to manufacture or import certain alkaloids and salts.

The Cuban law requires that a sample of the milk to be imported be submitted to the Secretary of the Treasury for examination. If the milk is approved, importations can be made thereafter without the submission of further samples. Ordinances for the Government of the municipalities of Cuba also prohibit the importation, selling, or placing in storage of adulterated condensed milk. The term "adulterated" refers to a milk in which the percentage of butter is less than 25 per cent of the solid matters contained in it, and to which there has been added any foreign substance, besides sugar, used as a means

of preservation. Furthermore, every can of milk must have an additional label, on which is stated in Spanish the date when it was placed in the container and the latest date the milk can be used as being good.

All restrictions on the importation and exportation of American goods were abolished on May 20, 1919.

MARK REGISTRATION BUREAU.

With the opening of Havana Bureau, actual operations of the International Trade Mark Registration Bureau for the northern group of republics have commenced. This Bureau is the outcome of the activities of the Buenos Ayres Convention of 1919, to protect more simply, economically and effectively the registration of the marks of manufacturers and merchants.

The process is simpler because the registration of a trade mark at home may be extended to cover other countries in the group by registering at the International office. The expenses of separate registration are eliminated and one fee covers all the countries of the group.

Six months priority are granted to applicants for deposit through the International Bureau, thereby making protection more effective. Two more ratifications are necessary to complete the number required to establish the southern group.

CUSTOM REGULATIONS.

The following information about the requirements of shipping documents will be valuable for exporters doing business in Cuba:

Invoices, of which five sets are required for Havana, and four for other parts, must be written in ink, and may be either in English or Spanish. If typewritten, the original copy must be presented; duplicates, etc., may be carbon copies. Invoices must contain name of shipper and consignee, name of vessel, marks and numbers, description of merchandise, specifying the component materials, gross and net weights of each article in kilos, detailed price and total value, including a statement of the expenses incurred on account of the merchandise up to the time it is packed and ready for shipment.

Prices should not be stated in bulk, but the price of each article or class of goods should be given separately. If there are no expenses this fact should be clearly expressed. In describing the merchandise, particular care must be taken in stating exactly the materials of which it is made, for example: in case of knives, state whether made of steel or iron, with wooden handles or bone handles; in case of shoes, whether of leather, with tops of cloth, canvas, etc. Documents covering shipments of fabrics must contain, besides the marks, numbers, classes, quantity and gross weight of packages, the following particulars: Nature of fibre (cotton, linen, wool, silk, etc.), kind of tissue (plain, smooth, twilled, damask-like, dyed by the piece or woven with threads dyed before being woven; number of threads in six square millimeters ($\frac{1}{4}$ inch); length and width in meters

and centimeters; weight per 100 square meters; price of the unity and partial value of each kind, and nature of same.

At the bottom of invoice, or on last sheet, if there are more than one, the manufacturer, producer, seller, owner, or shipper must write in Spanish and sign one of the declarations, according as the article shipped is, or is not, the product of the soil, or industry of the United States. If the manufacturer, etc., is not a resident of the place where the consulate is located, a local agent must be appointed to present the invoice, and such appointment must be in writing. In this case the agent must write and sign the following declaration: "Declaro que soy el agente autorizado por la persona que ha suscrito la anterior declaración, para presentar esta factura en la oficina consular de Cuba en esta plaza, a fin de que sea certificada." (I declare that I am the agent authorized by the person signing the preceding declaration to present this invoice at the consular office of Cuba in this city for the purpose of certification.)

The form of declaration for the manufacturer or producer of domestic good is: "Declaramos que somos los fabricantes (if the goods are manufactured); or "productores," if the goods are natural products de las mercancías relacionadas con la presente factura y que son ciertos los precios y demás particulares que en ella se consignan y que las mercancías contenidas en dicha factura son producto de la industria (or "del suelo," if the goods are natural products), de los Estados Unidos de América. The declaration for sellers, shippers or owners are the same, only the word "vendedores," or "embarcadores" or "dueños" is substituted for "fabricantes" or "productores" in the previous form.

Freights to the port of shipment, incidental expenses, custom house and statistical, fees, papers and stamps, wharfage, etc., must be included in the dutiable value as an actual part of the cost of placing the merchandise ready for shipment to Cuba, and they must be stated separately.

The insurance and consular fees will not be considered as part of the cost of the merchandise, the fee for consular certification must be included in the cost.

In order to have the advantage of the Reciprocity Treaty between Cuba and the United States, invoices under \$5.00 covering goods of the soil or industry of this country should be certified.

Each invoice must represent a distinct shipment by one ship to one consignee or firm of consignees. The consolidation of different consignments in a single invoice is not permitted.

Invoices as well as the declarations must be written on one side of paper only. No corrections, erasures, additions or alterations are allowed unless stated in a signed acknowledgement in Spanish or English preceeding the declaration.

Goods not the production of the soil or industry of the United States, should be placed on a separate consular and commercial invoice, as only such goods as are the production of the United States are entitled to benefit by the Reciprocity Treaty between Cuba and the United States.

Shipments of foreign goods under \$5.00 in value, consular invoice not required.

All shipments over \$5.00 in value, consular invoice must be presented.

No invoice will be accepted by the Cuban Custom Houses, which includes domestic and foreign merchandise.

Besides the marks, numbers, classes, quantity and gross weight of packages, the following particulars will be required on invoices covering shipments of fabrics:

Nature of fibre. (Cotton, linen, wool, silk, etc.). Kind of tissue. (Plain, smooth, twilled, damask-like or whether it is or not embroidered, bleached, half-bleached, stamped, dyed by the piece or woven with threads dyed before being woven; number of threads in six square millimeters, $\frac{1}{4}$ inch). Length and width in meters and centimeters, weight per 100 square meters, price of the unity and partial value of each kind, and nature of same; expenses up to the time of shipment to Cuba.

Mixed fabrics, cotton mixed with silk, wool, or any other mixture, should be so stated in the invoice. The principal material should also be stated and proportion of the principal material. If proportion of principal is silk or wool, then goods pay duty ad-valorem and not by threads as cotton goods. Also if goods contain one-fifth or more of silk, wool or other material, goods pay duty ad valorem as silk or wool. In the Custom Houses, samples of cotton fabrics are always taken, and sending samples avoids the piece of goods mutilated, and facilitates the work in the Custom House.

Ready-made clothing, wearing apparel of all kinds and of any style and, generally, all articles made up by the seamstress or tailor, shall be liable on their total weight to the duties on the principal and most prominent outside fabric.

Gross and net weight of box or package, must be given. When ready-made cotton clothing is shipped in cardboard boxes the net weight of these cardboard boxes should be given separately.

In the invoices for ready-made clothing to be sent to Cuba, the shipper should always give net weight separate of each class or lot of goods, and the reference mark or number.

Two copies of each set of bills of lading are required by the Consulate; the original is certified and returned, and a not-negotiable copy is kept on file.

Bills of lading for short shipped goods must also be signed by the Cuban Consul.

A duplicate copy of bills of lading may be obtained without charge, should the original be lost.

Bills of lading covering merchandise with a value of less than \$5,000 need not be certified.

Invoices covering shipments of automobiles to Cuba require maker and name of car, year's model, number of the motor, number of cylinders, H. P. type of car, and number of passengers.

Invoices of merchandise sent by mail must be certified by the Cuban Consul.

In those cases where a shipper has had an invoice certified at the Consulate, and it should later result that the steamship company has "shut out" the entire shipment or part of same,

the shipper must see that the steamship company marks on the bills of lading alongside of those goods which were "shut out," "Short Shipped." The consular invoice need not be certified, but it is well to notify the consignee so that he will, therefore, make his entry in the Custom House under the correct name of the steamer.

FREE LIST.

No charge is made for consular certification where the value of the shipment is less than \$5. For invoices valued from \$5 to 49.99 the fee is 50 cents; from \$50 to \$200 the fee is \$2; over \$200, \$2, plus an additional charge of 10 cents for each \$100 or fraction thereof in excess of \$200. Extra copies of invoice cost 50 cents each, and invoice blanks may be obtained for 10 cents per set. A fee of \$1 is charged for certifying each set of bills of lading.

The following articles may be imported into Cuba free of duty on compliance with the prescribed conditions and the formalities established in the Custom Regulations.

Trained animals, portable theaters, panoramas, wax figures, and similar objects of public entertainment, imported temporarily for not more than three months, unless extension be granted by Collector of Customs, provided that bond be given.

Receptacles exported from Cuba with fruits, sugar, molasses, honey, spirituous liquors, alcohol, and coconut oil, and reimported empty, including iron drums containing cordage oil.

Used furniture of persons coming to reside in the country, provided the same has been in use for one year. Includes household effects and furnishings such as pictures, books, pianos, organs, china, and kitchen utensils, in keeping with the position of the importer; likewise a carriage or buggy, bearing evidence of having been used for one year, when imported by a settler, together with household furniture.

Wearing apparel, toilet articles, and articles of personal use, bed and table linen, books, portable tools and instruments, theatrical costumes, jewels, and table services bearing evident trace of use, imported by travelers in their baggage in quantities appropriate to their class, profession, and position.

Plows, hoes, machets, and cane knives, exclusively used for agricultural purposes, and other exclusively agricultural implements, not including machinery.

Lithographs, posters, manufacturers' catalogues, calendars and folders for advertising purposes only having no commercial value and intended for free distribution.

Baggage and personal effects accompanying diplomat and other officials of foreign countries that accord the same treatment to Cuban officials.

Articles easily susceptible of identification, exported for repair, may be reimported free, on proof of identity, save for the repairs, which are dutiable.

Articles of which the Importation is Restricted or Prohibited.

Foreign coins of silver, bronze or nickel, with the exception of those of the United States of America.

Dynamite, gunpowder, and similar explosives, unless the importer is able to produce a special authorization for landing issued to him by the Department of the Interior (Secretaría de Gobernación).

For the importation of long arms of greater caliber than .32 or 5.5 millimeters, .44 caliber revolvers, and automatic pistols, a special permit is required.

The importation of silencers for firearms is prohibited.

Explosives, arms, and ammunition imported without official authorization in accordance with existing regulations, will be subject to confiscation upon arrival at a Cuban port. This does not apply to sporting guns and rifles for shooting galleries, for the importation of which no authorization is required.

Firearms, gunpowder, cartridges, dynamite and all kinds of explosives and munitions of war found maliciously concealed on board any vessel and not contained in the manifest, shall be confiscated and the captain shall be subject to a fine not to exceed \$2,000.

Paintings, publications, figures and all other objects offensive to morality are prohibited.

Merchandise whose importation is prohibited, shall be seized and confiscated.

Merchandise imported by passengers when found concealed on their person or in any other manner with intent to defraud the revenue shall be subject to seizure.

PENALTIES

Consignees of merchandise shall be subject to the following penalties and additional duties, in the cases specified below:

If the appraised value of any merchandise exceeds the declared value of same, it shall pay, besides the regular customs duties, an additional amount equal to 1% of the total appraised value for each 1% that said appraised value exceeds the declared value; and if said appraised value exceeds the declared value by more than 50%, except in cases of an evident clerical error, the declaration shall be considered as attempted fraud, and the merchandise shall be held and confiscated by the Government.

If the actual weight of a shipment exceeds the declared weight by a difference of from 1 to 15% (both inclusive) of the total weight of the shipment, the Customs Collector shall use his discretion in imposing additional duties not to exceed 1% of the total duties on the merchandise for each 1% of difference between the declared weight and the real weight. Such additional duties shall not be imposed by the Customs Collector in case he is satisfied that the discrepancy was unintentional.

When such difference exceeds 15% of the total weight of the merchandise, but does not exceed 50% of the said total weight, an additional duty of 1% for each 1% of difference

between the declared weight and the true weight shall be imposed.

Should the difference exceed 50% of the total weight of the merchandise the declaration shall be considered as attempted fraud, and the merchandise shall be held and confiscated by the Government.

In all cases of additional duties, obligatory or discretionary, if actually imposed, no exemption shall be made except with the approval in writing of the Chief of the Customs-Service in Havana, to whom an appeal in writing may be addressed, and whose decision shall be final.

The Cuban Custom House will impose a fine amounting to double consular fees if invoices and bills of lading are certified on a date later than the arrival of the corresponding ship at the first Cuban port of entry.

The Cuban Custom House will also impose a fine of double the fees failed to have been paid at the Consulates, on invoices whose values upon appraisal of the merchandise are found to be more than the value consigned.

CUSTOM HOUSES OF CUBA.

The following ports of the Republic are qualified for reception of merchandise:

Havana Matanzas, Cárdenas, Isabela de Sagua, Caibarién, Nuevitas, Gibara, Puerto Padre, Banes, Nipe, Baracoa, Guantánamo, Santiago de Cuba, Manzanillo, Santa Cruz del Sur, Jucaro, Tunas de Zaza, Trinidad, Cienfuegos, Batabanó, Nueva Gerona, Los Indios (Isle of Pines), Mariel.

Also, the following delegations of Custom Houses are qualified for the reception of merchandise, as sub-ports:

Jucaro, delegation of the Nueva Gerona (Isle of Pines) Custom House.

Sagua de Tánamo, delegation of the Nipe Custom House.

Vita, delegation of the Gibara Custom House.

Niquero, delegation of the Manzanillo Custom House.

Manati, delegation of the Puerto Padre Custom House.

A delegation of the Baracoa Custom House has been established in Cananova and other of the Santiago de Cuba in Nima-Nima, for the entrance direct from foreign ports of ships in ballast for the exportation of national products.

By a Presidential decree of February 27, 1919, the increase of 19 per cent. on storage rates authorized by a law of January 13 was abrogated in the case of sugar.

Cuban consulates are located in the following cities of the United States: Aguadilla, P. R.; Areciba, P. R.; Atlanta, Ga.; Baltimore, Md.; Boston, Mass.; Brunswick, Ga.; Chicago, Ill.; Cincinnati, Ohio; Detroit, Mich.; Fernandina, Fla.; Galveston, Tex.; Gulfport, Miss.; Jacksonville, Fla.; Kansas City, Mo.; Key West, Fla.; Los Angeles, Cal.; Louisville, Ky.; Mayaguez, P. R.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Newport News, Va.; Norfolk, Va.; Pascagoula, Miss.; Pensacola, Fla.; Philadelphia, Pa.; Ponce, P. R.; San Francisco, Cal.; San

Juan, P. R.; Savannah, Ga.; St. Louis, Mo.; Tampa, Fla.; Washington, D. C.; Detroit, Mich.; Cincinnati, O.; and Cleveland, O.

IMPORT TARIFF.

Under the terms of the reciprocity treaty, merchandise of American production is entitled to a reduction in custom duties. The percentage of reduction is stated at the head of each group in the tariff. Unless otherwise stated, duties are per 100 kilos, with an allowance made for the tare. This does not apply to those items marked gross or net weight.

Marble, Jasper and Alabaster. (Goods of this group imported from the United States, are entitled to a reduction of 20 per cent.)

Rough or dressed, squared, or prepared for shaping (gross weight), \$0.50; Slabs, plates, or steps (gross weight), 1.25; Sculpture, 3.875; All other articles, 2.50.—Other stones, natural or artificial: Slabs, plates, or steps, (gross weight) 0.625; wrought into other articles, 1.25; dressed stone for paving and curbing (gross weight) 0.0625.—Earths employed in manufactures and arts, including lime and gypsum, (gross weight) .25.—Cement (gross weight), 0.375.—Gypsum manufactures: statuettes, 3.75; other articles, 0.9375.

Shales, Bitumens and their Derivatives. (Goods of this group imported from the United States are entitled to a reduction of 20%.)

Tar and mineral pitch, asphalt, bitumens and shales (gross weight), 0.75. (Asphalt paving blocks and rock asphalt for paving purposes are dutiable in proportion to the percentage of asphaltum they contain, provided the duty be not less than \$0.05 per 100 kilos, gross weight).—Crude oils derived from shales, including crude petroleum; axle grease (gross weight); 1.75.—Crude lubricating oils (gross weight); 1.40.—Gas oil, used exclusively in the manufacture of illuminating gas in Cuban gas works, 0.875.—Petroleum and other mineral oils, rectified or refined, for illumination (gross weight), 4.375.—Refined lubricating oils (gross weight), 3.50.—Benzine, gasoline, and mineral oils, not specially mentioned, including vaseline (gross weight), 5.875.—Ores (gross weight), 0.125.—Cordage oil, imported by and used in manufacture of rope and cordage (gross weight), 0.875.

Crystal and Glass. (Goods of this group imported from the United States are entitled to a reduction of 25%. Glass windows, 30%.)

Common hollow glassware, including siphons for seltzer, mineral, or carbonated water; electric insulators, 1.30.—Ordinary glass receptacles for Cuban industrial establishments, 1.00.—Crystal and glass imitating crystal: cut, engraved or gilt, 18.20; other articles, 9.10.—Sheet glass or crystal: Tiles, paving or roofing, 2.145; Articles neither polished, beveled, engraved, nor annealed, 4.42; Window glass set in lead and polished or beveled plate glass, 6.37; Articles, engraved or annealed, 12.74.—Glass and crystal, tinned, silvered, or coated with other metals: Common mirrors not exceeding two millimetres in thickness, coated with red or dark amalgam, 13.00; Mirrors, other, not beveled, 19.50; Mirrors, beveled, 23.40.—Glass and crystal: Statuettes, flower-stands, vases, and similar articles for toilet and house decoration, (per kilo) 0.325; Lenses for eyeglasses and watch crystals, imitations of precious or ornamental stones; enamel, (per kilo) 1.30; Incandescent electric lamps, 3.25.

Pottery Earthenware, and Porcelain. (Goods of this group imported from the United States, are entitled to a reduction of 20%. Ceramic tiles and porcelain, 40%. Hollow earthenware, 25%.)

Articles of fire clay (gross weight), 0.39; Glazed paving brick, glazed blocks, glazed brick for sewers, glazed invert block, and

glazed invert brick for sewers, (gross weight) 0.065.—Roofing tiles of clay, not glazed, for building purposes (per 100 sq. feet) 1.50.—Glazed clay and terra-cotta sewer pipe, slabs or conduits of clay, cement or stoneware (gross weight, 0.325; Ceramic tiles and glazed roofing tiles (per 100 sq. feet), 3.25.—Hollow earthenware and stoneware: Household or kitchen utensils, except tableware, neither gilded, painted, nor ornamented in relief, 1.04; Dishes or other articles, neither gilded, painted, nor ornamented in relief, 3.90; Common bottles, 1.30; Flower pots, common, 1.30; Articles, gilded, painted or ornamented in relief, 7.28.—Earthenware (faience) dishes and hollow ware: Neither painted, gilded, nor ornamented in relief, 4.55; Gilded, painted or with ornaments in relief, 8.32.—Porcelain dishes and hollow ware: Neither painted, gilded, nor ornamented in relief, 7.54; Painted, gilded, or with ornaments in relief, 12.09.—Art goods for the dressing table and house decoration, of fine clay, earthenware, stoneware, bisque or porcelain (per kilo), 0.325.

Gold, Silver, Platinum, and Alloys, and Gold and Silver Plate.

(Goods of this group imported from the United States, are entitled to a reduction of 20%. Plated ware, 30%.)

Gold and platinum jewelry, silver jewelry with precious stones or pearls, and precious stones, pearls, and seed pearls not set (net weight), per hectogram, 9.375; Gold, platinum, or alloys in any other form (net weight), per hectogram, 3.50; Silver ingots, bars, plates, sheets or dust (net weight), per kilo, 3.25; Silver jewelry, without precious stones or pearls (net weight), per hectogram, 1.875; Silver in any other form, and platinum in ingots (net weight), per kilo, 10.00.—Gold and silver plated ware of all kinds, and jewelry made of metal, gold or silver plated, 32.5.

Cast Iron. (Goods of this group, imported from the U. S., are entitled to a reduction of 20%.)

Figs (gross weight), 0.10.—Articles not coated nor ornamented with another metal or porcelain, and not polished nor turned: bars, beams, plates, grates for furnaces, columns, and pipes (gross weight), 0.65; Lubricating boxes for railway trucks and carriages, and rail chairs (gross weight), 0.455; other articles, 0.975.—Articles of all kinds not coated nor ornamented with another metal or porcelain, polished or turned, 1.56.—Articles of all kinds, enameled, gilded, tinned, or coated or ornamented with other metals or porcelain, 0.299.

Wrought Iron and Steel. (Goods of this group imported from the United States, are entitled to a reduction of 25%. Cutlery, 30%.)

Iron, soft or wrought, in ingots, steel ingots (gross weight), 0.40.—Wrought iron or steel, rolled: Rails (gross weight), 0.65; Bars, of all kinds, including rods, tires and hoops (gross weight), 1.17; Steel bars of all kinds, including rods; when imported by manufacturers for use in their own establishments (gross weight), 0.90; Bars of all kinds of fine crucible steel (gross weight), 2.08.—Sheets, rolled: Neither polished nor tinned, 3 millimeters or more in thickness (gross weight) \$1.43; Neither polished nor tinned, less than 3 millimeters in thickness, and hoop iron (gross weight), 1.56; Tinned (gross weight), 1.95; Tin plate (gross weight), 1.50; polished, corrugated, perforated, cold-rolled sheets, galvanized or not, and bands of polished hoop iron (gross weight), 1.69.—Castings of wrought iron or steel: Rough, not turned nor fitted, weighing 25 kilos or more, 1.30; Less than 25 kilos (gross weight), 1.755. Finished: Wheels weighing more than 100 kilos, fish plates, rail chairs, sleepers, and straight axles, springs for railways and tramways; journal boxes (gross weight), 0.78; Wheels weighing 100 kilos or less; springs other than for railways and tramways; crank axles and cranks (gross weight), 1.82. Pipes: Coated with brass (gross weight), 1.82; other, (gross weight), 1.82.—Wire, galvanized or not: 2 millimeters or more in diameter, 1.30; When imported by manufacturers of iron beds and wire bed springs, 1.00; More than one-half and not more than two millimeters in diameter, 1.69; When imported by manufacturers of iron beds and wire bed springs, 1.30; one-half millimeter

or less in diameter, and wire covered with any kind of fabric, 2.08; When imported by manufacturers of iron beds and wire bed springs, 1.60.—Structural iron, (gross weight) 2.34.—Anchors, chains for vessels or machines, moorings, switches, and signal disks, (gross weight), 1.04.—Anvils (gross weight), 3.25.—Wire gauze: Not more than 19 threads per inch, 6.50; of 20 threads or more per inch, per kilo, 0.13.—Cables, fencing (except barbed fencing wire and staples), netting, furniture springs, (gross weight), 1.30.

Tools and implements (not apparatus): Fine, for arts, trades, and professions, of crucible steel, 10.40; Other tools, 3.25.—Screws, nuts, bolts, washers, and rivets; nails, spikes, tacks, and brads, 1.95.—Saddlery hardware: Made of iron or steel, bits, spurs, and all fittings for common harness, 3.90. Buckles: Nickeled, per kilo, 0.26; Other (per kilo), 0.195.—Needles, sewing or embroidering, pins, and pens (net weight), 0.39; Crochet needles, hooks and eyes, and hairpins (net weight), 0.39.—Cutlery: With common wooden handles, 0.26; All other cutlery (except pocket cutlery), including scissors, fishing hooks, 0.52; Surgical instruments, including dental instruments, pocket cutlery, side arms (not firearms), and parts of same, razors, 0.78.—Small arms and barrels: Barrels, unfinished, for portable arms (gross weight), 0.325; Barrels, finished, for portable arms (gross weight), 0.78; Small arms, such as pistols and revolvers, also separate parts, except barrels, 3.25.—Sporting arms, breech and muzzle loading, and separate parts thereof, except barrels, (per cent. ad valorem, 32.5).—Manufactures of tin plates, 5.20; Tin tops for bottles imported by manufacturers, 4.00; Articles of wrought iron or steel, not specially mentioned: Common, 3.90; Fine, polished, enameled, coated with porcelain, nickel or other metals (with the exception of lead, tin or zinc), or with ornaments, borders, or parts of other metals, or combined with glass or earthenware, 5.20.

Copper and Alloys of Common Metals with Copper.

(Goods of this group imported from the U. S. are entitled to a reduction of 20%.)

Copper scales, of first fusion, scrap, brass, etc., (gross weight), 3.75; Ingots and copper alloys (gross weight), 5.00; Rolled bars, 5.625; Sheets (gross weight), 6.25.—Wire, galvanized or not: 1 millimeter or more in diameter, 7.50 Less than 1 millimeter, 9.375; Gilded, silvered, or nickeled (per kilo), 0.625; Wire covered with insulating material, and cables for the transmission of electricity: not armored, 9.375; the same armored, 2.50; Wire gauze: not more than 99 threads per inch, (per kilo) 0.25; of 100 threads or more, 0.50.—Tubes and pipes, bearings, plates for fire boxes, and boiler-makers' wares, partially wrought (gross weight), 5.625.—Nails and tacks: Gilded, or nickeled (per kilo), 0.25; other (per kilo), 0.15.—Pins, pens, crochet needles, and hair pins, (net weight, (per kilo), 0.75.—Articles not specially mentioned, (per kilo) 0.20; Articles, gilded or nickel plated, not specially mentioned, except those used exclusively for sanitary constructions (per kilo) 0.625; Bronze in sheets imported by lithographic and printing establishments for use therein, (per kilo) 0.50; Articles, gilded or nickeled, used exclusively for sanitary constructions, (per kilo) 0.25.

Other Metals and Alloys. (Goods of American manufacture are entitled to a reduction of 20%.)

Mercury (gross weight), 0.25.—Nickel, aluminum and alloys: Lumps or ingots (gross weight), 3.75; Bars, sheets, tubes, pipes, and wire (gross weight), 8.75.—Other articles (per kilo), 0.625; Tin and alloys: lumps and ingots (gross weight), 5.00; bars, sheets, tubes, pipes, and wire (gross weight), 8.75; hammered in thin leaves (tin-foil) and capsules for bottles (per kilo), 0.04; other articles (per kilo), 0.625.—Zinc, lead, and other metals not specially mentioned, and alloys thereof: In lumps or ingots (gross weight), 1.25; in bars, sheets, tubes, pipes, and wire, including shot (gross weight), 1.875. Articles, gilded or nickeled, except those exclusively used for sanitary constructions (per kilo), 0.375; Same, exclusively used for sanitary constructions (per kilo), 0.25; Zinc nails and tacks, neither gilded nor nickeled (per kilo), 0.0875; Other articles, including type, (per kilo), 0.1875; Lead foil and capsules for bottles (per kilo), 0.05.

—Filings, shavings, cuttings of iron or steel or common metal, fit only for resmelting (gross weight), 0.15; slugs, 0.03.

Substances Employed in Pharmacy and Chemical Industries.

(Goods of this group imported from the United States are entitled to a reduction of 30%.)

Oil seeds, copra or coconuts (gross weight), 2.60.—Rosin, pitch (vegetable) and similar products (gross weight), 0.50.—Spirits of turpentine, 3.25.—India rubber and gutta-percha, in lumps (gross weight), 3.90.—Extracts of licorice, camphor, aloes, and similar vegetable juices (gross weight) (per kilo), 7.80.—Other simple vegetable products, not specially mentioned (gross weight), 3.575.—Hops for the manufacture of beer (gross weight), 2.75.—Animal products employed in medicine, not specially mentioned (gross weight), 2.34.—Natural colors, in powder or in lumps (ochers, etc.) (gross weight), 0.60.—Artificial colors of metallic bases: In powder or lumps, 2.55; Prepared in the form of paste, with oil or water, also lead or colored pencils, 5.00; Other artificial colors, in powder, crystals, lumps or paste, including lithographic inks (per kilo), 0.25.—Woods, barks, roots, etc., for dyeing (gross weight), (per kilo), 0.20; Madder (gross weight), 4.50; Indigo and cochineal (gross weight) (per kilo), 0.20; Extracts from logwood, archil, and other dyeing extracts, 5.00; Writing, drawing, or printing inks, 3.00; Coal-tar colors (per kilo), 0.20; Varnishes, 9.375; same imported by lithographic and printing establishments, 7.50; Blacking, (gross weight), 3.75.—Chemical and pharmaceutical products: Sulphur (gross weight), 1.95; Bromine, boron, iodine, and phosphorus (gross weight, except phosphorous), (per kilo), 0.234; Phosphorus for the manufacture of matches (per kilo), 0.18.—Acids: Hydrochloric, boric, nitric, and sulphuric, aqua regia (gross weight), 0.30; Liquid carbonic acid (net weight), 5.00; Other acids (gross weight), 5.00; Oxalic, citric, tartaric, and carbolic acids (gross weight), 1.00; Oleic, stearic, and palmitic acids, (gross weight), 1.40; Acetic acids (gross weight), 6.00; Other acids (gross weight), 5.00.—Oxides and hydroxides of ammonium, potash, and other caustic and barilla alkalis (gross weight), 0.25.—Common salt, of whatever origin, (gross weight), 1.00; Common salt, ground or manufactured, in any form (gross weight), 1.30.—Chloride of potassium, sulphates of soda, iron of magnesia, carbonate of magnesia, alum (gross weight), 0.45; Sulphate of ammonium, phosphates and superphosphates of lime, nitrate of potash and soda (gross weight), 0.03; Other salts of ammonium, salts of copper, chloride of lime, sulphate of potash, hyposulphite of soda and borax, sal soda, (gross weight), 0.75; Chlorates of soda and potash, (gross weight), 1.80.—Acetates and oxalates (gross weight), 3.25; Citrates and tartrates, 3.90.—Alkaloids and their salts, chlorides of gold and silver (net weight), (per kilo), 8.775.—Chemical products not specially mentioned, 0.065.—Extract of lupulin or hop meal for the manufacture of beer, 0.05.—Pills, including quinine, capsules, medicinal dragees, and the like, 0.325.—Pharmaceutical products, not specially mentioned, 0.13.

Oils, Fats, Wax, and their Derivatives. (Goods of this group

imported from the United States are entitled to a reduction of 20%; Soap, Glucose, 30%; Toilet articles, and dextrin, 40%.)

Vegetable oils: Solid (cocoanut, palm, etc.), (gross weight), 3.75; Liquid, except olive oil and cottonseed oil, (gross weight), 3.75; Cottonseed oil, to be used exclusively in the manufacture of soap, (gross weight), 0.50.—Cod-liver oil and other medicinal oils, not refined (gross weight), 1.875.—Glycerin, olein, stearin, and spermaceti, crude (gross weight), 1.40.—Other crude oils and fats, including olein and tallow, to be used in the manufacture of soaps (gross weight), 0.50.—Mineral, vegetable, or animal wax, unmanufactured, and paraffin in lumps (gross weight), 3.25; Paraffin in lumps for the manufacture of matches and candles, (gross weight), 2.50.—Articles of stearin and paraffin, wax of all kinds, prepared, 6.50.—Common soap in bars, including castile soap and ordinary scouring compounds, 3.90; Ordinary toilet soaps in cakes or tablets, 13.00; Fine toilet soaps, and all others, including medicated soaps, 26.00.—Toilet articles and essences: Of less than \$1.25 (per kilo) in value (per kilo 0.325; Of

more than \$1.25 (per kilo) in value, 0.325 plus 32.5% ad val.—Artificial or chemical fertilizers (gross weight), 0.05.—Starch, 3.90; Dextrin, 1.40; Glucose, 1.82.—Glues, albumens, and gelatin (gross weight), 5.07.—Carbons prepared for electric lighting (gross weight), 3.90.—Gunpowder, explosive compounds, and miners' fuses, 5.20.—Sporting powder, and other explosives not intended for mines, including fireworks, (net weight), (per kilo), 0.26.

Cotton, Raw and Yarn. Goods of this group imported from the United States, are entitled to a reduction of 30%.)

Cotton, raw and waste, (gross weight), 1.00; Articles manufactured of raw or waste cotton, (gross weight), 1.30.—Thread or yarn: On spools or in skeins or balls, for crocheting, embroidering, or sewing (net weight) (per kilo), 0.26; in skeins, spindles, or any other form, exclusively for the manufacture of fabrics (net weight), (per kilo), 0.15; Cordage, (gross weight), 7.80.

Cotton Fabrics. (All are dutiable per kilo, net weight.)

Fabrics, plain, napped or not, weighing ten kilos or more per 100 square meters, unbleached, bleached, or dyed; and fabrics, plain, napped or not, measuring not over 65 centimeters in width, weighing 8 kilos or more per 100 square meters, unbleached, bleached or dyed; having (in a space of 6 millimeters square) not more than 9 threads, 0.156; From 10 to 15 threads, 0.204; From 16 to 19 threads, 0.276; 20 threads or more, 0.42. The same fabrics, printed or manufactured with dyed yarns: Dutiable as the above, with a surtax of 30 per cent. Fabrics, plain, napped or not, weighing less than 10 kilos per 100 square meters, unbleached, bleached, or dyed, having (in a space of 6 millimeters square) not more than 6 threads, 0.10; from 7 to 11 threads, 0.24; From 12 to 15 threads, 0.324; from 16 to 19 threads, 0.444; 20 threads or more, 0.60; Same fabrics printed or manufactured with dyed yarns are surtaxed 40%.—Fabrics twilled or figured on the loom weighing 10 kilos or more per square meter, unbleached, bleached or dyed, having (in a space of 6 millimeters square), not more than 6 threads, 0.18; from 7 to 11 threads, 0.216; from 12 to 15 threads, 0.24; from 16 to 19 threads, 0.384; 20 threads or more, 0.504. The same fabrics, printed or manufactured with dyed yarns, are dutiable as the above with a surtax of 30%.—Fabrics, twilled or figured on the loom, napped or not, weighing less than 10 kilos per 100 square meters, unbleached, bleached, or dyed, having (in a space of 6 millimeters square), not more than 6 threads, 0.216; from 7 to 11 threads, 0.276; from 12 to 15 threads, 0.384; from 16 to 19 threads, 0.516; 20 threads or more 0.66. The same fabrics, printed or manufactured with dyed yarns, are dutiable as the above with a surtax of 40%.—Quilted fabrics, 0.288.—Piques, 0.54.—Carded fabrics: Unbleached, half bleached, or dyed in the piece, 0.096; bleached, printed, or manufactured with dyed yarns, 0.24.—Velvety fabrics, such as corduroys and velveteens, plush and threeply velvet, cut or not, 0.564.—Knit goods, 0.36; Undershirts and drawers with a plain finish, 0.96; Stockings, socks, gloves and other small articles with a plain finish, 0.84; same with a fine finish, 1.08.—Tulles: plain, 0.84; figured or embroidered on the loom, 1.104; Lace, blondes, and edging, 1.752.—Carpets of cotton, 0.18.—Fabrics called tapestry, for upholstering furniture and for draping, manufactured with dyed yarns; Table covers and counterpanes of the same kind, 0.384.—Wicks for lamps and candles, 0.18; wicks for the manufacture of candles and matches, 0.15.—Bags for packing sugar in sugar factories or refineries, 0.09.—Trimnings of cotton; ribbons and galloons; 0.598.—Braid and bands of cotton for reins, headstalls, and girths 0.1725.

Hemp, Flax, Pita, Jute, and Other Vegetable Fibers, Raw and Spun.

(Goods of this group imported from the United States are entitled to a reduction of 20%.)

Threads and yarn: on spools or in skeins or balls (net weight) (per kilo), 0.125; vegetable fibers, not specially mentioned, (net weight) (per kilo), 0.09375.—Sugar bags (gross weight), 2.00.—Rope and cordage: Twine and rope yarn and cord of hemp not exceeding 3 millimeters in thickness (net weight), 7.50; Cordage of

hemp, exceeding 3 millimeters in thickness (net weight), 7.50; Cordage of manilla hemp, sisal, pita, jute, or other fibers (net weight), 7.50.

Fabrics of Hemp, Etc. (are dutiable per kilo, net weight, unless specified.) (Goods of this group imported from the United States, are entitled to a reduction of 30 per cent.)

Fabrics, plain, twilled, or damask, weighing 35 kilos or more per 100 square meters, unbleached or dyed in the piece, having (in a space of 6 millimeters square): Not more than 5 threads per 100 kilos, 3.45; From 6 to 8 threads, 0.08625; 9 threads or more, 0.138. (The same fabrics bleached, half bleached, or printed, are subject to a surtax of 15 per cent.; if made with dyed yarns, 25%.)—Fabrics, plain, twilled, or damasked, weighing from 20 to 35 kilos per 100 square meters, unbleached or dyed in the piece, having (in a space of 6 millimeters square): Not more than 5 threads, 0.1035; From 6 to 8 threads, 0.138; From 9 to 12 threads, 0.207; From 13 to 16 threads, 0.276; 17 threads or more, 0.345. (The same fabrics bleached, half bleached, or printed, are subject to a surtax of 25%; manufactured with dyed yarns, 40%.)—Fabrics, plain, twilled, or damasked, weighing from 10 to 20 kilos per 100 square meters, unbleached or dyed in the piece, having (in a space of 6 millimeters square): Not more than 8 threads, 0.138; From 9 to 12 threads, 0.207; From 13 to 16 threads, 0.3105; From 17 to 20 threads, 0.43125; 21 threads or more, 0.60375. (The same fabrics, bleached, half bleached, or printed, are subject to a surtax of 30%; if manufactured with dyed yarns, 50%.)—Fabrics, plain, twilled, or damasked, weighing less than 10 kilos per 100 square meters, unbleached or dyed in the piece, having (in a space of 6 millimeters square): Not more than 8 threads, 0.1725; From 9 to 12 threads, 0.2415; From 13 to 16 threads, 0.345; From 17 to 20 threads, 0.60375; 21 threads or more, 1.035. (The same fabrics bleached, half bleached or printed are subject to a surtax of 30%; if manufactured with dyed yarns, subject to a surtax of 50%.)—Velvet and plush of linen, jute, etc., 0.345.—Knit goods even finished by hand: in the piece, or in the form of jerseys or drawers, 1.38; Stockings, socks, gloves, and other small articles, 1.725.—Tulles: Plain, 1.035; Figured or embroidered on the loom, 1.29375.—Lace, blonde, and edging, 3.45.—Carpets of jute, hemp, or other vegetable fibers without admixture of wool, 0.08625.—Fabrics called tapestry for upholstering furniture and for draping, table covers and counterpanes of the same kind, 0.483.—Trimnings, ribbons and galloons, 0.69.—Braids and bands, for reins, headstalls, and girths, 0.1955.

Wool, Bristles, Hair, Horsehair. (Goods of this group imported from the United States, are entitled to a reduction of 20%; wool 40%.) (Dutiable ad valorem.)

Bristles, 10%; Bristle brushes, in which the bristles determine in value, 43.75%; Hair and horsehair, 40%.—Wool, raw, 20%; Woolen yarn and worsted, 28.75%.

Fabrics of Wool, Bristle, Etc. (Goods of this group, imported from the United States, are entitled to a reduction of 40%.)

Squansskin of pure or mixed wool, 4 %; Manufactures of wool, including knit goods, 46%.

Silk and Manufactures Thereof. (Goods of this group, imported from the United States, are entitled to a reduction of 40%.)

Silk or floss silk: Twisted on spools, in skeins, or in other form, for sewing or embroidering (ad valorem), 34.5%; In skeins or other form, exclusively for weaving (ad valorem, 28.75%; Fabrics of silk, mixed or pure, (ad valorem), 51.75%.

Paper and Manufactures Thereof. (Goods of this group, imported from the United States, are entitled to a reduction of 30%. Pulp, 40%. Printing, wrapping and cigarette paper, 20%.)

Paper pulp, (gross weight), 0.15; Printing paper in rolls or sheets, white or colored, 5.00; Printing paper for periodicals, 5.00;

Paper, glazed or not, imported by lithographic and printing establishments, 4.00; Wrapping paper in rolls or sheets, not including manila, 3.125; (Paper, except manila, manufactured into bags of any kind shall be subject, when without printing, to a surtax of 30%; if printed, to a surtax of 50%.)—Writing paper in sheets, without printing, including blank books of the same, 10.00.—Paper printed, engraved, or photographed: Books, bound or unbound, and similar printed matter (gross weight), 1.625; Printed matter imported by mail is subject to duty, except publications in the form of folders and periodicals; Letterheads, forms for invoices, labels, cards, and the like, (per kilo), 0.13; Prints, maps, charts, etc., drawings, photographs, engravings, and pictures; lithographs, chromolithographs, oleographs, etc., used as labels, flags, bands, and wrappers for tobacco or other purposes: of 1 to 3 printings, inclusive, including articles printed solely in bronze, (bronze printing to be counted as 3 printings), but not including any article printed in whole or in part in metal leaf (per kilo), 0.065; same of 4 to 7 printings, inclusive, (per kilo) 0.26; same of 8 to 13 printings, inclusive (per kilo) 0.52; same, of more than 13 printings (per kilo), 1.04.—Wall paper, printed: on natural ground, 5.20; on dull or glazed ground, 7.80; with gold, silver, wool or glass (per kilo), 0.351.—Common packing paper, brown paper and sandpaper, 2.275.—Blotting paper, 2.99; other paper, not especially mentioned, including manila, 5.98.—Cigarette paper: in reams or sheets, 4.60; Same cut size or on reels, (ad valorem), 50%.—Chrome paper, imported by lithographic and printing establishments, 4.60.—Bristol board, fine cardboard, and cardboard covered with fancy paper, flowered, painted, embossed, or with any other kind of fancy work, 4.55; Other cardboard, and cardboard covered with ordinary paper, white or dyed, glazed or not, 1.30; Boxes manufactured from bristol board, or with ornaments of paper or other materials which do not chiefly determine the value, 9.10; Boxes manufactured from cardboard, 2.60; Cardboard, in sheets or otherwise, reinforced or not with a fabric, impregnated with tar, pitch, asphalt, cement, or similar material, and used as roofing (ad valorem), 32.5%; Other manufactures of Bristol board, or of fine or common cardboard, not especially mentioned, 26.00.—Pulp and carton-pierre: Unmanufactured, 1.30; Same manufactured, finished or not, including moldings, 19.50.

Wood and Manufactures. (Goods of this group, imported from the United States, are entitled to a reduction of 20%.)

Staves (per ton), 0.80; Ordinary wood: Boards, deals, rafters, beams, roundwood, and timber for shipbuilding (per cubic meter), 0.50; Same planed or dovetailed, for boxes and flooring; broomsticks and cases used for importing goods (gross weight) 0.20.—Cabinet wood: Boards, deals, trunks, or logs (gross weight) 1.50; Same sawed in veneers, 2.1875.—Coopers' wares: Fitted together (gross weight), 0.8125; Same in shooks, also hoops and heading (gross weight), 0.36.—Wood, cut for making hogsheads or casks for sugar or molasses (gross weight), 0.06.—Lattice-work and fencing (gross weight), 0.75.—Parlor and house furniture of wood, wholly or partly finished, and manufactures of wood, or of which wood is the component material of chief value, not specially provided for; wicker and cane furniture ad val. 31.25%.—Charcoal, firewood, and other vegetable fuel (gross weight) per ton, 1.875.—Cork: In the rough or in sheets, (gross weight), 1.40; Same manufactured, 4.50.—Rushes, vegetable hair, cane, osiers, fine straw, palm, genista and esparto in the rough, and baskets and other common wares of esparto (gross weight), 2.3125; Esparto manufactured into fine articles, rushes, vegetable hair, cane osiers, fine straw, palm, and genista, manufactured, not specially mentioned, 16.25.—Straw for the manufacture of hats, 13.00.

Animals. (Those imported from the United States, are entitled to a reduction of 20%.)

Stallions, not exceeding 150 centimeters in height, free; Stallions exceeding 150 centimeters in height, (each) 6.25; Geldings exceeding 150 centimeters in height, (each) 18.75; Geldings not exceeding 150 centimeters in height, (each) 2.50; Mares suitable for breeding, (each) 3.75; Mares not suitable for breeding (each) 18.75; Male donkeys exceeding 130 centimeters in height, free; All other don-

keys, (each), 6.25; Cattle of any kind, size, or origin, (unless imported for breeding purposes (gross weight) 2.925; Swine (each) 1.25; Female sheep, free; Goats and male sheep, 1.25; Animals not specially mentioned, (each) 1.25; Singing birds, parrots, etc., 0.625.

Hides, Skins, Leather, and Manufactures Thereof.
(American goods of this group are entitled to a reduction of 30%.)

Fur skins in their natural state or dressed, (ad valorem) 12.5%; Hides or skins, green, dry, salted, or pickled, (ad valorem), 12.5%; Hides tanned with the hair (ad valorem), 18.75%; Hides tanned, dressed, and finished, without the hair, including rough leather, sole leather, sole leather cut for mending, belting leather, harness (arreos), and saddlery leather, (ad valorem), 18.75%.—Skins tanned, dressed, and finished, including calf, kangaroo, sheep, lamb, goat, and kid skins (ad valorem), 18.75%; Patent or enameled leather and figured, engraved, or embossed leather, (ad valorem), 25%; Leather cut into shoe uppers or vamps or other forms suitable for conversion into manufactured articles, and also manufactures of leather, finished or unfinished, not otherwise provided for, (ad valorem), 31.25%; Leather gloves per kilo, \$4.375; Common baseball and boxing gloves (per kilo), 1.25; Boots, shoes, and slippers: (per pair), 0.195; Men's, size 5 or more, American measure, plus 13% (ad valorem). It is the practice to accept No. 38, Spanish measure, as equivalent to No. 5, American measure.—Boys', youths', women's, misses' and children's, 0.13, ad valorem, plus 13%.—Boots and shoes, size 9½ (children's) and under, American measure, 0.065, plus 13% ad valorem; Other boots, shoes and slippers, fancy or ornamented, 0.195 plus 13% ad valorem.—Riding boots, 2.50; Not applicable to hunting boots.—Sandals without leather, (per dozen), 0.50.—Draft harness other than for carriages (per kilo), 0.0625; Carriage harness, 0.125; Other saddlery and harness makers' wares; valises, hat boxes, and traveling bags of cardboard or leather, 0.25; Other manufactures of leather or covered with leather (ad val.), 31.25%.—Feathers for ornament, in their natural state or manufactured, (net weight), (per kilo), 2.00; Other feathers and feather dusters, per kilo, 0.50; Intestines, dried (net weight), per kilo, 2.50; Animal by-products, unmanufactured, not specially mentioned, (gross weight), 0.625.

Instruments (Dutiable ad valorem). (Goods of this group imported from the United States, are entitled to a reduction of 30%; Watches, 40%; Clocks, 20%.)

Pianos: Grand, 52%; Other pianos, 52%; Strung frames for pianos are liable to the duty leviable on pianos, though not imported with all the parts constituting that instrument.—Harmoniums and organs; Harps, violins, cellos, guitars and mandolins with inlaid work; Flutes and flageolets with the Bohem fingering system; Metal instruments of 6 pistons or more; Separate parts for wind instruments, of wood or brass, etc.; 52%.—Watches, chronometers, and movements, 32.5%.—Clocks with weights, and alarm clocks, and separate parts, 31.25%.

Apparatus and Machines. (All are dutiable ad valorem.)
(Goods of this group imported from the United States, have a reduction of 25% if they are made of copper or copper alloys, and 20% if made of any other metal.)

All weighing appliances, including scales and separate parts thereof, 25%.—Machinery and apparatus for making sugar and spirits, 10%.—Agricultural machinery and apparatus, 10%.—Steam engines, stationary, 25%; Marine engines, steam pumps, hydraulic, petroleum, gas and hot or compressed air motors, 25%.—Boilers, 25%.—Locomotives and traction engines, turntables, hydraulic cranes and columns, 25%.—Electric dynamos, inductors and separate parts, sewing machines and separate parts thereof, velocipedes, bicycles, and separate parts and accessories, including bicycle lamps; machines and apparatus, other, or of material not specially mentioned, also separate parts of all kinds, other than of copper or copper alloys, 25%.

Vehicles. (All dutiable ad valorem.)

Coaches and berlins, new, used or repaired; railway passenger cars of all kinds; baggage cars, trucks, and freight cars of all kinds; tramway cars for mines; street railway cars of all kinds; wagons, carts, and hand-carts; 31.25%.

Vessels. (All dutiable per gross ton.) (Goods of this group imported from the United States, are entitled to a reduction of 20%. Steam vessels, 25%.)

Sailing vessels, 1.875; Steam vessels with wooden hulls, 2.50; Steam vessels, 3.125; Salvage from wrecked vessels, (ad valorem), 10%.

Meat, Fish, Butter and Fats. (Goods of this group imported from the United States, are entitled to a reduction of 20%. Butter, 30%. Cheese, 40%. Fish, 25%.)

Poultry and small game (per kilo), 0.104.—Beef, pickled or salted, 3.64.—Pork, pickled or salted, 3.64.—Lard, 3.64.—Tallow, except when imported for the manufacture of soap, 2.60.—Bacon, 5.20.—Hams and shoulders, 7.15.—Jerked beef, (gross weight), 4.74.—Beef, canned, 6.60; Beef, fresh (net weight), 5.85.—Mutton, fresh, (net weight), 5.85.—Pork, fresh, (net weight), 5.20.—Butter, 9.10; Oleomargarine, 9.10; Oleo oil, imported by manufacturers of food-stuffs, 7.00.—Cheese, 6.50.—Condensed milk, (ad valorem) 13%; The importation of condensed skimmed milk is prohibited.—Salt cod and stock fish, hake and haddock, 1.30; Herring, pickled, smoked, salted, or marinated, and skate, salted, 1.30; Mackerel, pickled, smoked, salted, or marinated, 2.60; Salmon, smoked, salted, or marinated, 6.50; Oysters of all kinds, and shellfish, dried or fresh, (gross weight), 1.30.—Eggs, 6.50.

Cereals. (Goods of this group imported from the United States, are entitled to a reduction of 20%. Rice, 40%. Corn and Wheat, 30%.)

Rice, (gross weight), 1.20; Wheat (gross weight), 0.60; Corn, (gross weight), 0.39; Rye, (gross weight), 0.52; Barley for brewing, (gross weight), 0.50; Oats, (gross weight), 0.52; Flour and meal: Of wheat, (gross weight), 1.30; Of rice, (gross weight), 2.60; Of corn, (gross weight), 0.65; Of oats, (gross weight), 1.56.

Vegetables and Fruits. (Goods of this group, imported from the United States, are entitled to a reduction of 20%.)

Beans, (gross weight), 1.43; Peas, (gross weight), 1.43; Onions, (gross weight), 0.91; Potatoes, and other fresh vegetables not specially mentioned, (gross weight), 0.65; Flour of pulse, (gross weight), 3.25; Fruits, fresh, (gross weight), 0.78; Almonds of all kinds, (ad valorem), 25%; Fruits, dried or evaporated, (gross weight), 1.95; Chestnuts, dried or fresh, (gross weight), 1.95.

Seeds and Fodder. (Goods of this group imported from the United States, are entitled to a reduction of 20%.)

Clover seed, (gross weight), 4.50; Flaxseed, (gross weight), 1.025; Alfalfa seed, (gross weight), 2.50; Fodder and bran, (gross weight), 0.585; Broom corn, (gross weight), 0.80.

Preserves and Canned Goods. (Dutiable ad valorem.)

(Goods of this group imported from the United States are entitled to a reduction of 40%. Fish, 25%. Vegetables, 30%. Preserved food, 20%.)
Fish or shellfish, preserved in oil or otherwise, in cans; Vegetables, pickled or preserved in any manner; Fruits, preserved; 32.5%.—Preserved food, not specially mentioned; sausages, truffles, sauces, and mustard; food extracts for seasoning purposes; 31.25%.

Oils and Beverages. (Goods of this group imported from the United States, are entitled to a reduction of 20%.)

Wines and beer in barrels, 30%. Liquors, 25%.
Olive oil; cottonseed oil (except for the manufacture of soap): In receptacles of earthenware, wood, or tin, 3.00; In bottles, including the weight of the bottles, 3.75.—Alcohol, (per hectoliter), 18.20; Spirituous liquors, liqueurs, cordials, and all mixed spirits,

not specially mentioned: In casks, barrels, or half barrels, (per hectoliter), 27.30; In bottles, flasks, demijohns, or similar receptacles, (per hectoliter), 44.20; Whiskey, rum, and gin, in casks, barrels, or half barrels, (per hectoliter), 23.40; Same in bottles, flasks, demijohns, or similar receptacles, (per hectoliter), 29.90; Sparkling wines, (per liter), 0.85; All white wines (except sparkling), and all red or white dessert or liqueur wines: In casks, barrels, or half barrels, (per liter), 0.07; In bottles, flasks, demijohns, or similar receptacles, (per liter), 0.20; Other wines: in casks, barrels, or half barrels, (per hectoliter), 4.50; In bottles, flasks, demijohns, or similar receptacles (per hectoliter), 13.00; Beer, in casks, (per hectoliter), 4.29; Beer, in bottles, (per hectoliter), 5.20; Cider, and other fruit-juice beverages, and other non-alcoholic beverages, not otherwise provided for: In casks, barrels, or half barrels, (per hectoliter), 2.08; In bottles, flasks, demijohns, or similar receptacles (per hectoliter), 3.90; Vinegar: In casks, barrels, or half barrels, (per hectoliter), 3.00; In bottles, flasks, demijohns, or similar receptacles (per hectoliter), 9.00.

Other Alimentary Substances. (Goods of this group imported from the United States are entitled to a reduction of 20%.)

Saffron, safflower, and flowers of "tobar"; cinnamon of all kinds, cloves, pepper, and nutmegs; vanilla and tea: (ad valorem), 31.25%.—Coffee, chicory: In the bean, raw, 23.40; Roasted, in the bean or ground, 29.25; Cocoa of all kinds, in the bean, ground, or in paste, cocoa butter, 26.325; Chocolate and sweetmeats, pastes and starches (feculas) for soups and other alimentary purposes, (ad valorem), 32.5%.—Biscuits: Ordinary, 1.95; Fine, of all kinds, including the immediate package, 4.55.—Honey (per gallon) 0.26; Molasses, (per gallon), 0.078; Sugar, raw (net weight), 1.00; Sugar, refined, (net weight), 0.9375; Saccharin, (net weight), per pound, 1.95.

Miscellaneous Articles. (Goods of this group imported from the United States, are entitled to a reduction of 20%. Umbrellas and Parasols are 40%.)

Fans, (ad valorem), 39%; Trinkets and ornaments (except those of gold or silver, gold or silver plated, and those in which the component substance of chief value is amber, jet, tortoise-shell, coral, ivory, meerschaum, mother-of-pearl, horn, whalebone, celluloid, bone, or imitations thereof, (net weight), (per kilo), 0.975; Amber, jet, tortoise-shell, coral, ivory, mother-of-pearl, and meerschaum unwrought (net weight), (per kilo), 1.30; Manufactures of (net weight) (per kilo), 2.34; Horn, whalebone, celluloid, and bone; also imitations unwrought, (net weight) 0.78; Manufactured into cinematograph films and similar articles, (net weight), 5.20; Manufactured into any other articles (net weight), 1.56; Walking sticks, and sticks for umbrellas and parasols, (ad valorem), 32.5%; Coffins and accessories thereof, (ad valorem), 32.5%; Hair, human, manufactured, (net weight), (per kilo), 6.50; Cartridges, primers and caps, 39.00; Tarpaulins coated with sand, for vans; felt and tow, tarred or coated with pitch (gross weight), 0.364; Oilcloths, for floors and for packing, 3.90; Other oilcloths, (per kilo), 0.078; Cases: of fine wood or leather, lined with silk, and similar cases, (net weight), (per kilo), 0.975; same of common wood, cardboard, osier, and the like, including letter files (net weight), (per kilo), 0.26; Artificial flowers of fabric or wax, also pistils, buds, leaves, and seeds for the manufacture of flowers, (net weight), (per kilo), 1.00; Matches of wax, wood, or cardboard, (net weight), (per kilo), 0.26; Rubber hose and piston packing, (per kilo), 0.065; All other articles of rubber, (per kilo), 0.26; Games and toys, except those of gold, silver, tortoise-shell, ivory, mother-of-pearl, (per kilo), 0.13; Umbrellas and parasols, and oil and water-color paintings, (ad valorem), 32.5%; Hats and caps, finished or not, (ad valorem), 26%; Waterproof or rubber fabrics, including boots and shoes of rubber: Cotton, (per kilo), 0.325; Same, imported by manufacturers for use in the manufacture of raincoats, (per kilo), 0.25; Woolen or silk, (per kilo), 0.65; Same waterproof fabrics in the piece, imported by manufacturers for use in the manufacture of raincoats, (per kilo), 0.50; (Made-up articles and manufactures of their materials, except boots and shoes of rubber, are liable to a surtax of 30%.) All other articles, wares, merchandise,

and effects, not otherwise enumerated or provided for, except raw materials, (ad valorem), 32.5%; Raw products, not specified, (ad valorem), 13%.

Tobacco.

Tobacco: Plug and twist (andullo), (net weight), 10.50; Snuff, or other manufactured tobacco, (net weight), (per pound), 0.12; Leaf tobacco, stemmed or unstemmed, whether wrapper or filler, (net weight), (per pound), 5.00; Cigars, cigarettes, and cheroots of all kinds, 25% ad valorem, plus (net weight), (per pound), 4.50.

FINANCE.

The budget of the Government of the Republic of Cuba for the fiscal year 1918-19 estimated the receipts at 64,460,000 and the expenditures at \$54,394,865. Of the expenditures \$15,099,170 were for the account of the department of war and marine and \$9,831,12 for public instruction.

The total revenue from 17 months of the operation of the stamp tax from the 1st of September, 1917, to the 31st of January, 1919, was \$4,697,735, which represents an approximate monthly average of \$275,102.

During the fiscal year of 1918-19 the customs duties amounted to \$39,546,560, which shows an increase of \$57,556 over the revenue of 1917-18 which was \$39,489,004.

The customs revenue of Havana during the months of July and August, 1919 amounted to \$5,517,749, of which \$2,800,284 was collected during the first month and \$2,717,465 during the second.

The greatest customs revenue ever taken in the port of Havana in one month was collected in the month of October 1919, amounting to \$3,511,442.

According to the latest official data the debt of Cuba was:

Exterior debt, 1904, 5 per cent.	\$28,808,000
" " 1909, 4½ per cent.	16,500,000
" " 1914, 5 per cent.	10,000,000
Total Exterior Debt	\$55,308,000
Interior Debt, 5 per cent.	10,615,400
Total Debt,	\$65,923,400

In March, 1918 the United States Government placed at the disposal of the Cuban Treasury, through the legation in Washington, \$15,000,000, a loan guaranteed by 5 per cent. interest-bearing Cuban bonds.

The registration of stock companies during the fiscal year 1918-19, in all mercantile registries of the Republic shows a total of 303, with a total capital invested of \$301,678,944.

The companies cover the following lines: General business, 131; oil and mines, 43; sugar industries, 22; general industry, 94; insurance companies, 13.

BANKING.

The principal banks operating in Cuba are:

Banco de la Havana, Havana. (Business being transferred to the National City Bank of New York.)

Banco Español de la Isla de Cuba. Capital, \$8,000,000. Forty branches.

Banco Nacional de Cuba. Havana. Established in 1901. Capital, \$6,860,455; surplus, \$1,500,000. Branches, 35. New York Agency, 1 Wall Street.

Banco Territorial de Cuba. Havana. Capital, \$5,000,000.

Royal Bank of Canada. Capital and surplus, \$25,000,000.

The Trust Company of Cuba. Capital, \$500,000; surplus, \$315,000.

Banco Prestario de Cuba (Pledge Bank of Cuba). Capital, \$500,000.

The National City Bank of New York has established branches in the following towns of Cuba: Havana. Santiago de Cuba Cienfuegos, Camaguey, Matanzas, Pinar del Rio, Cardenas, Guantánamo, Santa Clara, Unión de Reyes, albarián, Galiano, Sanctispiritus, Manzanillo, Cuatro Caminos, Artemisa, Bayamo, Ciego de Avila, Yaguajay, Sagua la Grande, and Remedios.

On the 1st of September, 1919 a new banking house commenced operations in Havana, known as the Banco de Proprietarios Industriales y Arrendatarios (Real Estate Bank), .

On June 1, 1919 a branch of the International Bank of Cuba was organized in the city of Matanzas, on September of the same year one branch of this bank was opened at Palacios and another at Banes.

The first part of September a branch of the Banco Nacional de Cuba was opened in the town of Cabañas.

The profits of the Bank of the Island of Cuba during the year ended December 31, 1918, amounted to \$751,843.

The Banco Español de la Isla de Cuba obtained profits in the first six months of 1919 amounting to \$1,102,060. Of this amount \$800,000 was placed in the reserve fund, which added to the reserve fund, amounting in December, 1918, to \$1,900,000, makes a total of \$2,700,000.

The balance of the Banco Nacional de Cuba on the 30th of June 1919 was as follows: Assets—Cash on hand, \$55,534,774; bonds and securities, \$4,004,567; loans and discounts, \$62,599,166; bank buildings and real estate, \$1,805,837; miscellaneous accounts, \$352,097; on deposit in other banks, \$5,175,780; safety deposits, \$14,115,817; amounting to a total of \$143,588,041. Liabilities—Capital, \$5,000,000; reserve, \$7,000,000; undistributed profits and dividends, \$1,077,379; deposits, \$107,019,136; owing to other banks and bankers (accounts current), \$4,109,927; pension fund of employees, \$90,000; acceptances and letters of credit, \$5,175,580; safety deposits, \$14,115,817, all being equal to the assets.

The new stock exchange in the national capital opened for business in October 1918.

Banking Holidays.

January 1st, New Year's Day—February 24th, Revolution of Baire-May 20th, Independence Day—October 10th, Revolution of Yara—December 7th, Death of Maceo—December 25th, Christmas Day. Dues days precede Sunday and legal Holidays. July 4 and July 21 (Anniversary of Belgian Independence) were made

Holidays in 1918 by special act of Congress, but, were not added to the permanent list of National Holidays.

The President has authorized the coining of 3,000,000 silver pesos, with their respective fractions of pesetas, reales, and nickels.

SHIPPING.

The Peninsular & Occidental S. S. Co., operates a service between Key West, Fla., and Havana, Cuba, daily, except Sunday, making the run in from six to seven hours. Connection is made at Key West with solid, fast Pullman trains, via the "Over-sea Railroad," for all points of the United States.

Other steamship lines are the United Fruit Company, the Cuba Mail & S. S. Co., known as the Ward Line, the Southern Pacific S. S. Co., the Munson Line, the United Steamship Co., the Elder Dempster Line, the Compañía Trasatlántica Española, the Sociedad Anónima de Navegación, Trasatlántica Line, the Norway-Mexican Gulf Line, and the Holland-American Line.

The following steamship lines are about to be established. The Earn Line Steamship Co.'s freighters, to ply between Havana and Philadelphia; a monthly schedule on the Italian line between Genoa, Barcelona, and Havana; the Royal Mail between Cuba, Spain, and England; the ships of Suárez & Co., of Havana, to sail between Havana, the United States, and Argentina; and a line of Dutch freight steamers which on their way from Holland to Havana, will stop at some northern ports of Spain. The steamers of the Brazilian Lloyd Steamship Co., which ply between Rio de Janeiro and New York, will touch at Havana in accordance with arrangements between both Governments.

The Japanese company "Osaka Shosen Kaisha" has recently established a direct line of steamships between the ports of Yokohama and Havana, making the trip via the Panama Canal, with Cienfuegos and Santiago as ports of call. The inaugural trip was made by the steamship Panama Maru, which completed the voyage in 68 days, arriving at Havana on August 13, 1919.

A direct line of freight steamers was established in August, 1919 between the ports of Havana and Buenos Aires.

A steamer passenger service has been inaugurated between Kingston, Jamaica, and Santiago de Cuba.

The Jacksonville Shipping Co., has established two lines of steamer to make trips from Jacksonville to different ports of the coast of the north of Cuba, and from Port St. Joe, Florida, to Havana, respectively.

Beginning November 4, 1919 the Munson Steamship Lines increase a services to Cuba by dispatching ships to Havana twice a week, and to Matanzas once a week.

Regular French mailboat service is being reestablished between the ports of St. Nazaire, El Havre, La Havana, and Vera Cruz.

Beginning July 1919, the boats of the South Atlantic Maritime Corporation (American), established weekly service between Sanannha and Havana and monthly service from Charleston, Jacksonville, Wilmington, and Brunswick, to Brazil and

Argentina. Six steamships were selected for the service, two of which run between Cuba and Savannah.

On September 17, 1919 the Cuban Steamship Co., Viajera Antillana was organized in Havana, with an authorized capital of \$4,000,000, representing by 20,000 shares of preferred stock, with a fixed dividend of 8 per cent, and a nominal value of \$100 each; and 20,000 common shares. The company is making arrangements with English and American shipyards for the construction of seven steamers.

In October 1918 an express and transportation company entitled "Compañía General de Mensajerías y Transportes," with a capital of \$5,000,000, was organized in Havana to engage in the express and freight business in the provinces of Pinar del Río, Havana and Matanzas.

During 1918, 2,292 merchant vessels entered the port of Havana, as against 2,481 of the previous year.

RAILROADS.

The railroad system of Cuba consists of about 2,360 miles of lines. The principal railway companies being as follows:

Cuba Railroad Co., Incorporated in New Jersey in 1912. Authorized capital, \$30,000,000; issued, \$20,000,000. Mileage, 690.

Cuban Central Railways, Ltd. Registered in London in 1899. Capital, \$11,500,000. Mileage, 353.

Havana Terminal Railroad Co. Incorporated in Maine in 1900. Capital, \$5,000,000.

Matanzas and Havana Railway Co., Ltd. Registered in London in 1871. Capital, \$500,000. Mileage, 19.

United Railways of the Havana and Regla Warehouses. Registered in London in 1898. Capital, \$54,800,000. Mileage, 681.

Western Railway of Havana, Ltd. Registered in London in 1892. Capital, \$6,000,000. Mileage, 147. Controlled by the United Railways Co. as stated above.

Construction work was commenced in February 1919 on a railway from Cienfuegos to Fomento, via Guaos, Camanayagua, Barajagua, Mosa, and Manicaragua. This line will traverse a rich agricultural and mining section, and is expected to be a boom to sugar-cane growers, inasmuch as it will solve the difficulties they have heretofore had to contend with in the transportation of sugar cane.

In January 1919 work was commenced on the electric railway of Sancti Spiritus, which will connect the city with Guayos, Hevia, Cabaiguan, and Santa Lucía.

By a Presidential decree the Cuban Central Railways Co. has been granted an extension of one year for commencing and three for completing the port works at Isabela de Sagua, the construction of which was authorized on June 29, 1917.

The Cuba Railroad Co. is to construct a branch line 11 kilometers long. It will start from the Fomento-Casilda line and run to Manicaragua.

The Chamber of Representatives has approved the building of an electric railroad from Sancti through GuXayos, Nelva, Cabaiguan, and Santa Lucía. The concession has been granted to the Electric Light & Traction Co., of Sancti Spiritus.

Under a law of May 6, 1919, an appropriation of \$100,000 was made with which to begin the construction of a cart road from Nuevitas to Camagüey, via the town of Minas.

The Guantanamo and Eastern Railroad Co. increased its net capital in 1918 by \$120,472. The gross receipts during that year were \$784,664, as compared with \$555,950 in 1917. The operating expenses in 1918 and 1917 amounted, respectively to \$761,342 and \$526,220.

The net profits of the Havana Electric Railway Company during the first seven months of 1919 amounted to \$1,574,397. This total shows an increase of \$105,971 over an equal period of 1918.

A subsidy has been granted to the Manzanillo-Niquero Railroad, amounting to \$12,000 per kilometer. This railroad will go through Calicito, Campechuela, Ceiba Hueca, San Ramón, Media Luna, and Vicaria. The company will begin to receive the subsidy after constructing the first five kilometers.

By order of the board of directors in London, a 2 per cent. dividend of the United Railways of Cuba was declared out of the profits of the fiscal year ending June 30, 1919.

POSTS & TELEGRAPHS.

There are 658 Post-Offices in the island, and over six thousand miles of telegraph lines. Nine wireless stations are operated by the Government.

Work is in progress on the new wireless telegraph station at Nueva Gerona, Isle of Pines. The building in which the installation will be made is built of concrete blocks, villa style.

The Pan American Wireless Telegraph & Telephone Co. has been granted a concession for the establishment of an international wireless telegraph service between Cuba, the United States, and other countries, the company agreeing to erect a number of receiving and transmitting stations in the Republic.

By Presidential decree of August 2, a concession was given to Señor Carlos I. Párraga to establish a public telegraph and telephone service by means of cable communication between the Republic of Cuba, the American Continent, and the other Antilles. The cable to be laid between the Province of Havana and the United States must be in working order within two years.

The company was formed on October 27, 1919, known as the Cuban-American Telephone & Telegraph Co., with a subscribed capital of \$2,000,000 which will take up the project.

Under the name "Cuban American Aircraft Corporation" a Company has been formed in Habana to take up all business connected with aviation. It will establish a school for aviators in the Republic, and organize a mail and passenger service between the United States and Cuba, and between Havana and the principal Cuban cities.

On October 28, 1919 an Aerial Freight Service was established between New York and Havana. The hydroplane leaving New York on the date mentioned made stops at Atlantic

City, Norfolk, Wilmington, Charleston, Jacksonville, Miami, and Key West.

A recent executive decree fixes \$300 as the maximum amount of a postal money order on the United States that any one person can draw on the same day, and \$500 as the maximum sum that can be sent to any one person on any one day. The charges for postal money orders on the United States are as follows: For a money order not exceeding \$2.50, 3 cents; more than \$2.50 and not over \$5, 6 cents; more than \$5 and not in excess of \$10, 12 cents; more than \$10 and not over \$20, 23 cents; more than \$20 and not excess of \$30, 35 cents; more than \$30 and not exceeding \$40, 46 cents; more than \$40 and not exceeding \$50, 58 cents; more than \$50 and not exceeding \$60, 69 cents; more than \$60 and not exceeding \$75, 83 cents, and more than \$75 and not exceeding \$100, 1.15.

By a Presidential decree of October 4 last the postal rates on first-class mail were reduced to the prewar rate, thus repealing the decree of October 29, 1917, by which the rate was increased.

Parcels mailed to Cuba must not be sealed.

As there is no parcel-post convention between the United States and Cuba, the provisions of paragraph 189, on page 154 of the Postal Guide for 1918, are not applicable to packages of merchandise mailed in the United States and addressed for delivery in Cuba under the provision of the postal convention between the United States and Cuba, which stipulates that articles other than letters in their usual and ordinary form must never be closed against inspection.

INSURANCE.

The insurance business in Cuba is growing rapidly. Among the foreign companies operating there, the Equitable, of New York; the New York Life; the Sun Life of Montreal; the Standard Life Insurance Co., all have headquarters in Havana.

The principal Cuban Fire Insurance Company is "El Iris," established in 1855.

The profits of the Compañía Internacional de Seguros, S. A., at the end of the first year of its establishment were \$385,000, most of which will be turned into the reserve fund.

A general insurance company has been organized in that city under the title of "La Unión Antillana, S. A.," dealing in maritime and land transportation insurance.

PUBLIC WORKS.

A recent presidential decree provides for the following appropriations for Public Works: An annual appropriation of \$1,200,000 for the construction of a central road connecting all of the provinces; \$764,000 for roads from Bartolome to Buena Vista; from Pipian to the town Vegas; from Santa Clara to Sagua la Grande; from Santo Domingo to Sitiecito, passing through Rodrigo; from Río Canimar to the Linomar or Cardenas Road; from Victoria de las Tunas to Puerto Padre; from Kajagua to Tamarindo; and from Manzanillo to the main road of Vicana;

an annual appropriation of \$380,000 for three consecutive years for the sanitation of the city of Guantanamo; \$85,000 for the drainage of the lands surrounding the village of Caimanera; \$225,000 for the reconstruction of the Lan Animas Hospital of Habana; \$135,000 for new buildings at the National University; \$24,000 for a hospital in the city of Nuevitas; \$60,000 for a hospital at Jaguani; 120,000 for repairs to the streets of the town of Limonar; \$120,000 for a similar work in Palma Soriano; \$30,000 for the construction of a prison in the town Moron; and \$100,000 for a park at Baire.

By laws recently passed by Congress and signed by the President on July 25, 1919, \$655,000 were appropriated for funds for public works, to be distributed as follows: Suspension bridge over the Saramaguacan River, municipality of Camaguey; \$60,000; repairing the streets of Bolondron and Guira de Macuriges, Province of Matanzas, \$15,000; rebuilding and extending the Paseo de Marti, in Matanzas, \$50,000; building of roads, \$250,000 construction of a prison of the judicial district and courthouse at Ciego de Avila, \$60,000; construction of a building for the city hospital of Manzanillo, \$60,000; for the equipment of this hospital, \$10,000; construction of bridges in the Province of Matanzas, \$150,000.

The department of public works has begun the construction of a new zone of communications to connect by good roads the outlying districts of Luyano and Atares and other points with Havana.

The summer of 1920 will see the opening of Marianao Beach, a summer resort to be constructed by the Compañía Urbanizadora del Parque y Playa de Marianao. This company has contracted with the Compañía de Construcciones y Urbanización to build 11 chalets there.

LIST OF PRINCIPAL DEALERS:

HAVANA.

Agricultural Implements.

Vizoso y Casteleiro, Lamparilla 4; Fair & Horter, San Ignacio 14; Frank G. Robbins y Co., Obispo 55; The Mill Supply y Co., Ríola 8.

Automobile Importers.

G. Canal y Co., Belascoain 7; Garcia y Carreras, Morro 8 y 10; Compañía Cubana Sud-Americana "Sperber"; Eligio y Evello Cuervo, Manrique 84; A. H. de Diaz y Co., Cuba 3; Jose M. Dueñas, Marina 18; Fiat America Latina Lange y Co., Belascoain 4; L. Gazel, Marina 20; David Namier, Blanco 10; Nicolas Prieto Facciolo, Aguilar 50.

Coal Importers.

Rojo y Aponte, Oficinas 33; Compañía Carbonera de Cuba, Mercaderes 22; Cuban Coal Co., Lonja 421 y 422; Havana Coal Co., San Pedro 2; Andrea y Pelleya, Cristina 3; Pocahontas Coal Co., Lonja 213 y 214; Regla Coal Co., Elicio del Banco Nacional 201; The West Indies Coal Co., San Pedro 6.

Construction Contractors.

Pedro B. Aleman, Zanja 125; Nicolas Almeida, Neptuno 242; José Alonso, Crespo 25; Alberto Balmaseda, Omoa 12; Tomas Barrero, División 15; Enrique Blanco, Primelles 12; Rafael Brito, Fábrica y

Herrera; Tomas Bustillo, Tejadillo 37; Ricardo Cagigas, Santa Gertrudis 44; Fernando Carro, San José 168; Antonio Castell, Santos Suarez 11; Antonio Caleté y de la Torre; Manuel Cuervo, Molaja 47; Francisco Díaz, Chavez 12; Alfredo Estrada, Campanario 186; Antonio Fernandez de Castro, Aguilar 50; Esteban Formoso, Nejtuno 175; Manuel García, 14 entre 13 y 15; Nicanor García, Estrella 43; Pablo Gasó, 4 entre 17 y 19; Antonio Gonzalez, Romay 56; Pedro Gonzalez y Belmonte, Manrique 27; Rafael Herrera, Alambique 67; Abelardo Lago, Refugios 32; Tomas Lopez, Luyano 177; Manuel Mallorquin, Lealtad 230; Rafael Marco, Anton Recio 8; Ceferino Martinez, Jove-llar 6; Jose Lagueruela, Suarez 36; Guillermo Ordóñez, Villegas 37.

Musical Instruments.

Bahamonde y Co., Bernaza 16; Campa y Co., Compostela 112; Hnos. Carballal, San Rafael 133; Vda. e hijos de Carreras, Aguacate 53; E. Custin, Habana 94; José Giralt e hijo, O'Reilly 61; Anselmo Lopez, Obispo 127; Gabriel Prast, Nejtuno 70; Sucesores de Antonio Salas, San Rafael 14; L. John Atowers, San Rafael 29; Salvador Xiques, Galiano 106; Zarracina y Co., Compostela 100.

Machinery Importers.

Hijos de T. Alexander, Lonja bajos; Enrique Allo y Co., Amargura 96; Francisco Amat, Cuba 60; American Trading Co. of Cuba, Lonja 418 al 420; A. Arango Rodil, Empedrado 22; Aspuro y Co., Mercaderes 22 y 24; Hnos. Basterrechea, Lamparilla 9; J. F. Berdens y Co., Cuba 64; Stefano Calcavechia, San Juan de Dios 3; Castelleiro y Vizoso, Lamparilla 4; Jose Fernandez, Mercaderes 40; J. S. Gomez y Co., Mercaderes 17; Victor Gonzalez y Mendoza, Amargura 23; Carlos Hempel, Aguilar 95; J. E. Hernandez, Inquisidor 5; Jose Lish, Empedrado 22; Lombard y Co., O'Reilly 30; Marina y Co., Mercaderes 26.

Milliners.

Pilar Agustín, Galiano 74; Pilar Alvarez de Alonso, Compostela 114 B.; Fernandez y Alvarez, Galiano 70; Anoro y Alvarez, Obispo 70; Ramona Basl, Obispo 113; Altagracia Bentley de Orta, Obispo 94; Charles Berkwitz, San Rafael 22; Dolores Busquet, Prado 94; Alberto Cabrera, Monte 47; Eugenio Calmet, Monte 65; Emilia Calvo, Luz 10; Victor Campa y Co., Monte 55; Canedo y Superville, Galiano 87; Fernandez y Carrodegua, Galiano 126; Maria Colome de amar, Factoria 25; Diego y Fernandez, Galiano 64; García y García, San Rafael 19; Florence B. Henm, O'Reilly 81; Jose Inclan y Alonso, Teniente Rey 19; Dulce Maria Ituarte, Nejtuno 78; Lopez Rio y Co., Galiano 72; Maribona y Rodriguez, Monte 61; Rosa Morales de Basarrate, Compostela 50; Flora Pedroso, Gloria 100; Mercedes Rodriguez, Corrales 146; Pedro Salas, Salud 2; Stenberg Bros., Obispo 102; Tapie Socurs, Obispo 121; Trinidad Crapi, San Rafael 26; Isidoro Vogel, Obispo 64.

Chemical Products.

Bins y Horn, Cuba 51; Vda. de Jorge Fortun, Galiano 69; Babst Grossmann y Co., Empedrado 10; Agencias Nitrate y Co., Banco Nacional 510; Tomas F. Turull, Cuba 124.

Rubber Tyres.

Mercedes B. Hamel, Aramburo 6; Eppinger & Paetzold, San Ignacio 56.

Toy Stores.

García Alvarez, San Rafael 28; Rafael Benitez e hijos, Belascoain 32; Jesús Blanco Salgado, Mercado de Tacon 72, 73 y 74; Fernandez Heno. y Co., Obispo 60; Nemesio Fernandez, Obispo 96; Riveron y Herera, Cuba 83; Hierro y Co., O'Reilly 51; José Lopez, Ríola 9 y 11; Marcelino Martínez Castrillon, Obispo 74; Joaquín Puga Matos, Monte 77; Jose Roy, Monte 27; Rodriguez y Co., Obispo 36; Romero y Toblo, Obispo 85; Hnos. Sanchez, Obispo 28; J. Wechsler, Obispo 108; Vicente Zabala, Belascoain 16.

Shirts.

José Acdo Rivas, Principe Alfonso 388; Mariano Agudo Saro, Belascoain 50; Alonso y Pelayo, Neptuno 63; Bernardo Alonso, El Tercer Pueblo, Principe Alfonso 189; Alejo Alvarez, Mercaderes 45; Manuel Alvarez, Egido 41; Pedro Alvarez Mendez, Rragones 44; Agustín Arguelles, The Cuban Herald, P. Martí 109; Angel Arias, Belascoain 36½; Casimira Arismendi, Principe Alfonso 15A.

Corsets.

La Espirella, O. Reilly 81; Eloisa Garcia, Compostela 36; Juana Garcia, Aguilar 25; Luisa Garcia de Lopez, Lamparilla 31; Catalina Mulet, Animas 20; Adrienne Roy de Cappolecchia, Aguacate 70; Josefina Vda. de Queralt, San Rafael 36½.

Glassware.

P. Alvarez, S. en C. La America Gallano 113; Generoso Canizo Gomez, Sta. Clara 24; Tiburcio Ibarra, El Globo, Oprabia 17; G. Pedrañas, S. en C. El Palacio de Cristal, Teniente Rey 26; Pomar y Graño, S. en C., La Cruz Verde, Mercaderes 42.

Leather Goods.

Arrojo y Co., S. en C., Calzado Luyano 150; S. Arrojo y Co., Callejón de S. Martín esq. Calzada Infanta; Varas y Barcena, Cuba 79; Nicanor Varas, c. de S. Martín esq. Calzada Infanta; M. Carmona y Co., O'Reilly 47; Andres Espantoso, S. en C., Calzada Infanta 45; José Ferran y Mas, Teniente Rey 50; Matias Varas, La Teneria, Teniente Rey 50.

Druggists.

José Gardano, Belascoain 117; Antonio Gonzalez Curquejo, San José, Habana 112, y Lamparilla 36, 38 y 40; Manuel Johnson y Larraide, Pl y Margall 30; Majó y Colomar, Gallano 129; Ernesto Sará, Teniente Rey 41; Francisco Taquechel, Pl y Margall 27; José V. Acosta, Empedrado 26 y 28; José P. Alacan, Diez y siete 21; Guillermo Aldazabal, Aramburo 23; Antonio Alonso, Amistad 68; Juan Aluja, Bernaza 4; Miguel Alvarez Ortiz, American Drug Store; Domingo Amador, Lamparilla 74 esq. a Villegas; Luis Arisso, Oficios 56; D. M. Armand, Churruca 16; Aurelio del Barrio, Industria 104.

Sporting Goods.

Luis L. Aguirre y Co., Ríela 98 y Mercaderes 19; F. A. Bavá, San Rafael 20; Octavio Gonzalez, S. en C., S. Rafael 4; Aurelio G. y Alfredo L. Owens, Principe Alfonso 227; Adolfo Spinola, El Centro del Sport, O'Reilly 94.

Jewellers.

Nury Abdelmur, Teniente Rey 83; Vicente Diaz, Calle de Neptuno 63A.; Candido Garcia, La Equidad, Angeles 5; Guasch y Miranda, Muralla 61; Hierro y Co., Versailles; José Ruiz, Neptuno 21; Santos y Alvarez, Murallas 117; Vazquez Patiño y Co., Bernaza 31; Nury Abdelmur, Teniente Rey 83; Begnino Alvarez, S. en C., Ríela 80.

Umbrellas.

Lucas Caballero, Callejón de la Marina, esq. Cda. de Concha; Camporredondo y Hno., Aguacate 112; Ramón Canals, O'Reilly 75; F. Charavay, O'Reilly 79; Cardina G. de Delgado, Galathea, Pl y Margall 38; José Gonzalez Calzada de Vives 101 y 103; Lopez y Snchez, Americana, Pl y Margall 119.

Shoes.

Peletería Washington, Obispo 31, esq. a S. Ignacio; Tosar y Vila, Luz 99; Acdo Amavizcar y Co., La Bomba, Manzana de Gomez; Vicente Abadín y Co., S. en C., San Rafael 7; Norberto Alonso y Co., La Corona, Principe Alfonso 233; Marcelino Arrinda, San Rafael 23;

José Bagur, El Paquete Barcelones, Zulueta 30; Sebastián Benejam, Washington y Bazar Inglés, Obispo 31 y S. Rafael 124; C. R. Camino, Belascoain 8; Víctor Campa y Co., Príncipe Alfonso 55.

Perfumery.

Eduardo Planté, La Constancia, Manrique 94 y 96; Arení y Co., La Diamela, Falgueras 3; Crusellas y Co., Esteves 43; Crusellas y Hnos., Sta. Rosa 2 al 8; Juan Mayol, Rodríguez 56; Francisco de la Maza, Aguila 292; Francisco Sabio y Co., Manrique 94 y 96; Carlos Terren, Bernaza 60.

Furs.

J. F. Berndes y Co., Cuba 64; Carlos Bidegain, Teniente Rey 83; M. Carmona y Co., O. Reilly 47; Santiago Garrido, Salud 5.

Hardware.

Alonso Busto y Co., S. en C., Aguacate 132; Alvarez Garcia y Co., La Más Fermoso, S. Rafael 28; Amado Paz y Co., Aguacate 112 y 114; Arriola y Durán, S. en C., S. Ignacio 76; Víctor Campa y Co., La Isla de Cuba, Príncipe Alfonso 55; Hnos. Daly, La Batalla, Príncipe Alfonso 17 y 19; Fernandez y Co., Egido esá. Príncipe Alfonso; Herreo y Co., El Iris, Ríola 28; Martínez Castro y Co., S. en C., Aguacate 59; Domingo F. Prieto, Bernaza 71.

Books.

José Alvella, Belascoain 32B.; Roque Antuñano, La Burgalesa, Príncipe Alfonso 45; Jaime Benavent, Bernaza 48; Candido Benito, Aguilar 75; Cao y Rivera, Obispo 75; Pedro Carbón, Obispo 63; Andres Cueto, La Cosmopolita, Obispo 25; Antonio Franquis, Pedrosó 15; Cayetano Cordon, O'Reilly 75; Mauro Perez, Reina 47.

Earthenware, Glass and Porcelain, Importers.

P. Alvarez, S. en C., La America, Gallano 113; Vda. de F. Calvo y Co., Compostela 114; Generoso Cañizo Gomez, Santa Clara 24; Casa Blanca, Neptuno 46; Humara y Co., La Bomba, Ríola 85 y 87; Tiburcio Ibarra, El Globo, Obrapia 17; Louis Julick, Príncipe Alfonso 201 y 209; Otaolaurregi y Co., Gallano 114 y 116; G. Pedroarias, S. en C., El Palacio de Cristal, Teniente Rey 26; Pomar y Graña, S. en C., La Cruz Verde, Mercaderes 42.

Modistes.

Pilar Alvarez de Alonso, La Parisien, Compostela 114B.; J. L. Arsin y Hno., Consulado 111; Ramona Bast, Obispo 113; Altagracia Bently de Horta, Obispo 94; Bruntshwig y Co., Galerias La Fayette, O'Reilly 37 y 39; Carvajal y Co., Príncipe Alfonso 77; Emilio Carvó, Luz 10; Amilia Dubernard, Modas Francesas, O'Reilly 98; Dolores Femina Busquets, P. Martí 96; Pedro Fernandez, Pi y Margall 117.

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Alfonso y Añé, Zanja, 129; José Beltran, Belascoain, 41; Ramón Portas, Angeles, 15; Manuel Aedo Garcia, Príncipe Alfonso, 295; G. E. Alvarzi, Villegas, 66; Manuel Arango, Indio, 44; Armas y Soto, La Nacional, Príncipe Alfonso, 481; Bahamonde y Co., Bernaza, 16, y Obrapia 103, 105 y 107; Barro Soane y Co., Angeles, 53; Charles Blasco y Co., O'Reilly, 6.

Clocks and Watches.

Manuel Fuentes, El Rubí, Salud, 18; Alvarez Cernuda y Co., S. en C., Pi y Margall, 123; Benigno Alvarez, S. en C., Ríola, 80; Francisco Alvarez, O'Reilly, 15½; Allebasi y Riccardi, Pi y Margall, 56; Benito F. Andrade, Bernaza, 24; José Andrés, Aguacate, 64; José Andrés, Belascoain, 46 y Pi y Margall, 90; Juan Aranguren, Gallano, 88; Manuel Barba, La Mina, Gallano, 72.

Tallors.

M. Cantero, O'Reilly, 42; Carré y Solares, San Rafael, 15; Dalgado y Rodríguez, Villegas, 59; Albino Fernandez, Compostela, 97; Manuel Lamas, San Juan de Dios, 12; José López y Hno., Muralla, 9; Manuel Otero, American Stile, Bernaza, 29; Alonso y Pelayo, Neptuno, 63; José Alonso, Neptuno, 230; Modesto Alonso, La Moda Elegante, Ríola, 48.

Hatters.

C. R. Camino, El Gallo, Neptuno y Concordia; Felipe Gallo Alonso, Los Aliados, Habana, 79; José Bagur, El Paquete Barcelonés, Zulueta, 30; Faustino Barros, Manzana de Gómez, esq. a Zulueta; M. G. Bonachea, Pl y Margall, 4; M. Carballido, San Rafael, 1; José Núñez, El Pasaje, Manzana de Gómez (interior); José Presno, La Diana, Belascoain, 29; Antonio Rodríguez, Animas, 28; Baldomero Rubiera, Palais Royal, O'Reilly, 92.

Dry Goods (Wholesale).

Victoriano de la Sota, La Casa Azul, Belascoain, 75; Alvare Hno. y Co., S. en C., Amargura, 15; Alvarez y Anoro, S. en C., Obispo, 70; Alvarez y Fernandez, La Opera, Galiano, 70; Pedro Alvarez Menéndez, Dragones, 44; Castañón Galindez y Co., S. en C., San Ignacio, 33; Diaz Gutiérrez y Co., Amargura, 28; García Tuñón y Co., S. en C., Aguilar, 95; Izaguirre Rey y Co., Aguilar, 120; Ramiro de la Riva, La Oriental, Pl y Margall, 72; Valdes y Pérez, El Correo de París, Obispo, 80.

SANTIAGO DE CUBA.**Stationery.**

Eduardo Beltran, Heredia Alta 4 y 5; F. Detrell y Co., "La Desada," Dubois, 8; I. Domingo y Co., Marina Baja, 29; Mir y Plossa, E. Palma Baja, 13; Puig y Pujol, "La Atlantida"; Juan E. Ravelo, Marina Baja, 4; Pedro Rovira, Marina Baja, 47; Vaillant y Hno., Saco Alta, 15.

Jewelry.

Cesar Covani, Estrada Palma, 2; S. D. Gramatges, Saco Alta, 26; M. Gremati, Saco Baja, 2; Hnos. Deleyto, Estrada Palma y Saco; Domingo Domingo, J. A. Saco, 18; Tirso Infante, Estrada Palma, 4; Vega e Infante, Estrada Palma, 12; José María López, Dubois, 4; Magín Meléndez, Estrada Palma, baja, 15; Pelayo Morell, Estrada Palma, baja, 3; Hnos. Regojo, J. A. Saco, alta, 17; José Rev, Sagarra, baja, 4; Hierrezuelo y Ruiz, J. A. Saco, alta, 21.

Machinery Importers.

Jorge Druelle, Sta. Rita, 5; J. Francoll, Gallo, 1 y 3; Enrique Schumann Cristina, baja, 13; Vallis Rivera y Co., Jaguey, 19 y 21 y Gallo, 8.

Furniture.

Julio Alba, Marina baja, 13; A. Antonetti, J. A. Saco, baja, 34 y 36; Pedro Artigas, Sagarra, baja, 10; Pedro Gándara Gano, Estrada Palma, alta, 11; Pedro Cano López, Aguilera, 12; Cano y Hnos., Carmen, 17; Estevenell y De la Peña, "La Gran Bretaña," Lacrete; Luis Gómez, Estrada Palma, 32; José Matos, J. A. Sacos; Hnos. Regojo, J. A. Saco, alta, 27; Antonio Veloso Castro, Marina baja, 6.

Hardware.

Carlos Abraham, J. A. Saco, 24; Nicolas Abraham, Saco, 24; Domingo Agif, Estrada Palma, 2; Luis Alonso, Mercado, 200; James Atuart, Plaza del Mercado; R. B. Bucher, Pio Rosado, 4; R. de Bustillo y García, Estrada Palma, baja, 5; Pedro Cano Gándara, Estrada Palma, 11; José Cano López, Mercado, 3; José Castro, J. A. Saco, alta, 17; M. Cremati, J. A. Saco, baja, 7; Alfonso Cristoy, Cristina y Marina; Seng Chong, Estrada Palma, 2; Weng Chang, Estrada Palma, 3; E. Danger, Estrada Palma y San Jerónimo; Deleyto y Hno.

Estrada Palma y Saco; Remigio Fernández, J. A. Saco, alta, 2; José R. Fuentes, Aguilera 15; Goya Gutiérrez y Co., Sagarra, baja, 9 y 11; Julia Hernández, Plaza del Mercado; Elias Juliano Milki, J. A. Saco, 27; I. O. Lamarche, Saco, alta, 11; Soler y Liñero, San Francisco y E. Palma; Isidro Mustesler, Plaza del Mercado; Manuel Navarro, Estrada Palma, 58; Adán Paez, Mercado; Aurelia Pagés, Mercado; Cinca y Pangellos, Saco, alta, 10; O. R. Price, Maine y Estrada Palma; Santos y Hnos., Estrada Palma y Maceo; Domingo Velazco, Cristina, alta, 56; Chang Weng, Estrada Palma, baja, 3.

Clothing.

American Clothing Store, Saco alta, 19-B; Rubero R. Ibarra, Marina, baja, 22; Secundino Pérez, "Los Estados Unidos"; O. R. Price, Maine.

Milliners.

Ramón Feliú, Estrada Palma, baja, 3; Santos y Hermanos, Estrada Palma y Maceo; Fernández Vidal y Co., Saco y Estrada Palma.

Men's Hats.

G. Arias y Co., Estrada Palma, 8 y 16; Juan Blanco, Estrada Palma, 12; S. Catalá y Co., Estrada Palma, 1; Juan Corredor, Estrada Palma, 20; Muñoz y Dewelde, Saco, alta, 9; P. Duany, Estrada Palma, 1; Ferrer y Co., Aguilera, 17; Juan García, Estrada Palma, 16; García y Hno., Sagarra, baja, 3; Carlos Ginesta y Ruiz, Saco, alta, 78; German Herrera, Estrada Palma, baja, 3; Pedro Miguel, Aguilera y Plaza de la Libertad; Rubirosa y Co., Gallo, 80; Martín Salas, Barrancones, 4; Ernesto Velázquez, Mercado, 72 y 77; Viuda de Bartolomé Vidal, Barrancones, 7.

Dry Goods.

Vidal y Arredondo, Gallo, 10; Juan Roboum, Padre Pico, alta, 8; José Battle, Plaza del Mercado; José Caba, Saco, alta, 5; Canto y Co., Saco, alta, 1; José López Cano, Plaza del Mercado; L. Cobian, Saco, alta, 11; Elena Fadel, Plaza del Mercado; Agustín Ferrer, Aguilera, 17; Torrens y Ferrer, Carlos Dobols, 12; Lisardo García, Saco, 32; Natalio Gatas, San Carlos, 22; Carlos Ginesta, Enramadas, 78; Gonzalez Hno. y Co., San Tadeo, 13; Tomás Gonzalez, Barrancones, 10; Antonio Guyol, Enramadas, alta, 32; Elias Juliano Mulki, Saco, alta, 27; Fausto Magrans, Estrada Palma, 4; José Marina Fernandez, E. Palma, baja, 97; Feliciano Méndez, Gallo, 35; Pedro Miguel, Aguilera, 72; Raimundo Navarro, Plaza del Mercado; Concordio Pujols, Nepomuceno, alta, 74; Roses y Hno., Estrada Palma, 39; Rubirosa y Co., Gallo, 80; Martín Salla, Barrancones, 4; Santos y Hnos., Estrada Palma y Maceo; Miguel Schiffitie, Plaza del Mercado; Mirabent y Soler, Estrada Palma, 88; José Vázquez Rodríguez, Matadero, 27.

Shoes.

Enrique Armaignac, Gallo, 66; José del Barrio, Estrada Palma, 73; José Castillo, Pozo del Rey, 66; Téllez Cause, Calvario, 1; Miguel González Céspedes, Maceo, 8; Ernesto Guillén, Pozo del Rey, 152; Francisco Pérez, Gallo, 16; Rubirosa y Co., Estrada Palma, 46.

DOMINICAN REPUBLIC.

The Dominican Republic occupies the eastern portion of the Island of Santo Domingo or Quisqueya, and has an area of about 18,045 square miles, or about the size of the States of Vermont and New Hampshire combined. It is less thickly populated, however, since its population according to official estimates, is about 708,000, and this estimate is considered rather high.

The population is formed mainly of a mixed race of European African and Indian blood; but there are many creoles of Spanish descent and a number of Europeans specially Turks and Syrians.

The capital, Santo Domingo, was founded by Bartolomeo Columbus in 1494, so that it is the oldest European City in the continent.

The census of Santo Domingo commune taken in April, 1918, showed a total of 38,920 inhabitants, of which 26,870 are urban and 12,050 rural. Of this population 38,339 were Catholics, 461 Protestants, and 70 of other denominations.

The rural census of the commune of Santiago, taken in Oct. 1918, shows the following results: Sections of the commune of Santiago, 112; number of inhabited houses, 9,204, and number of inhabitants, 52,266. This population consisted of females, 26,668, and males, 25,598. There were 275 foreigners in the commune and 51,991 natives. The cultivated lands, in tareas (a tarea is slightly in excess of 628 square meters) were, approximately, as follows: Tobacco, 93,542; cacao, 23,840; coffee, 13,125; sugar cane, 75,557; guinea grass, 261,275; and small fruits, 91,439. The stock of the commune consisted of bees, 18024; horses, 11,057; hogs, 36,075; goats, 20,900; sheep, 1,225; and horses, 8,538. The census shows 47 municipal schools, 10 private schools, and 3,644 matriculates 3,12 of which were in the municipal schools. The commune had 383 stores, 128 factories, and 39 shops.

The vital statistics of the country in 1918, were 41,072 births (21,136 boys and 19,936 girls) and 10,071 deaths (5,276 males and 4,795 females), making a total increase of 31,001 in the population. Marriages recorded during the year numbered 3,737. The provinces in which the greatest number of births were recorded in 1918 were Santo Domingo, 6,165; La Vega, 5,560; Azua, 5,206. The provinces with greatest mortality were Santo Domingo, 1,617; Seybo, 1,384; Santiago, 1,162; La Vega, 1,049; and Pacificador, 1,040.

The number of immigrants to the Republic in 1918 were 4,988, showing a falling off in immigration in comparison to previous years, with the exception of 1914, where there was

less. In 1918, 4,005 males, and 983 females entered the country, of whom 1,425 were married and 3,563 single; 2,157 white and 2,831 of other races; 4,606 could read and 382 were illiterate; 4,616 were foreigners and 372 were Dominicans. The difference between the number of entries and departures shows a balance in favor of the population of 2,706 persons.

An executive order promulgated on April 4, 1919 prescribed that until April 1, 1921, it is prohibited without express authority of the Executive power for anyone to induce or attempt to induce laborers to leave the country for employment abroad by means of the offer, general or specific, of any material consideration or compensation; and for any vessel to undertake a voyage from the Dominican Republic, the principal object of which is to transport laborers for employment abroad in countries of which such laborers are not citizens or subjects, or in which they have no domicile or residence. Violations of this order are punishable by a fine of not less than \$100 nor more than \$500, or imprisonment for not less than two nor more than six months, or both. The fines in the latter case shall constitute a lien on such vessel and on any property of its owner or agent and the imprisonment shall be imposed on the owner or agent thereof.

The country is nominally a Republic. Its Constitution, proclaimed in 1844, was amended in different years, the last amendment having been made in 1908. The last elected President was Dr. Francisco Henríquez Carbajal, whose term commenced on July 25, 1916, and was to last for six years. On November 29, 1916, however, a military government was proclaimed by United States naval officers. The military governor assumed both the executive and legislative powers. United States naval officers are at the head of the administration departments.

SUGAR.

Sugar is one of the principal products of the country.

The 1918-19 sugar season in the Dominican Republic closed up in August.

A grand total of 1,166,761 bags of 320 pounds each, or 166,680 long tons, were produced, as compared with 143,430 tons made during 1918. Although the actual total is 23,250 tons ahead of the previous year, very few mills were able to grind as much as had been anticipated, and the total output is considerably below the estimate made at the beginning of the year. The failure to approach this estimate is attributed in large measure to the early beginning of the rainy season, which compelled several estates to close down with considerable ripe cane still standing in the fields. The persistent wet weather which prevailed throughout May and June, the most important grinding months, is blamed for the unsatisfactory extraction, which in some instances ran as low as 9 per cent.

As usual, sufficient Dominican labor was not available to take care of the crop and many of the negro cutters ordinarily brought in from Haiti, St. Kitts, St. Martin, Antigua, and other near-by islands were either kept at home by the influenza epidemic and the stringent travel regulations or were attracted

to Cuba by the higher scale of wages prevailing. In order to secure a sufficient supply of cane cutters for the new crop some plantations have decided to extend the piecework system now in vogue to a limited extent while others hope to attract men by the payment of small bonuses upon the completion of the season.

The Canadian Food Board purchased practically the entire crop of 1919 at a figure equal to \$5.76 c. i. f. New York. While some cargoes were transhipped at American ports the bulk of the crop was shipped direct to Canadian refineries. Toward the close of the season several shipments were dispatched to France, and inquiries recently received from Spain and Algiers were under consideration. Sufficient tonnage was available throughout the year to move the crop without undue delay.

The sugar crop for the season 1919-1920 is estimated as follows:

Macoris district, 865,000 bags; Santo Domingo district, 310,000; Azua district, 52,000; La Romana district, 185,000. Total, 1,412,000 bags. This estimate shows an increase of about 246,000 over the last season, or a little over twenty per cent.

The estimate is based on a total of 15 mills working, of which 7 are in the Macoris district, 4 in the Santo Domingo, 3 in the Azua, and one in the La Romana district. The output of the largest mill, the Consuelo, is estimated for 1920 at 225,000 bags.

The work of installing a sugar central at Barahona by a Puerto Rican company, which proposes to invest \$10,000,000 in the enterprise, is underway. A considerable part of the level area of the province will be used, and especially the greater part of the rich Neyba valley. Irrigation works, and water supply for which will be taken from the Yaque del Sur River, have also been commenced. It is proposed to make this central one of the largest in the Antilles.

TOBACCO.

The leading tobacco-growing Provinces are in the order named: Santiago, Puerto Plata, La Vega, and Espaillat. The town of Santiago de los Caballeros is the center of this industry, where most of the tobacco is brought in to be sorted and repacked, and Puerto Plata is the port through which most of it is exported. Moca, in the Province of Espaillat, La Vega, the capital of the Province of the same name, and Navarrete, in Santiago, are also important centers of the tobacco trade. About 75 per cent. of the crop is grown in the Province of Santiago and 15 to 20 per cent. in Puerto Plata, and the remainder is about equally divided between La Vega and Espaillat.

The tobacco crop is usually bought from the growers through brokers who work for account of packers or exporters in the towns, charging them \$0.50 a bale commission. There are from 300 to 400 brokers.

There are two types of tobacco, one known as "criollo," the other as "tabaco de olor," which latter is made into cigars and cigarettes for domestic consumption. The type known as "criollo" usually comprises about 80 per cent. of the crop.

Prior to the war the tobacco industry was controlled by

German firms in Bremen and Hamburg. They advanced money to the packers and the latter through brokers to the farmers. The prices obtained were so low that they hardly covered the cost of production.

Since the war most of the tobacco has been shipped, either direct or through New York to Spain, France, Italy, Algiers, Holland, and Switzerland. It seems probably that Dominican tobacco will hereafter continue to be shipped directly to the consuming markets of Europe instead of through Bremen and Hamburg, as formerly.

There are no large or scientifically managed tobacco plantations in the Dominican Republic. The average farm has from 3 to 4 acres under cultivation. A few have up to 50 acres, but they are the exceptions.

The methods of cultivation, curing, and packing are most primitive. Seed is sown by hand, as planting machinery has not yet been introduced.

Practically all of the tobacco farms are owned and worked by Dominicans. Wages in the tobacco industry are as follows: on the farm, from \$0.60 to \$0.70 per day; peon labor in the warehouses, from \$0.80 to \$1 per day; and foremen, \$1 per day and up. All wages are for a day of 12 hours.

The average value of land suitable for tobacco may be placed at \$30 an acre, although near the towns it is often held as high as \$60 and may be purchased as low as \$6 in inaccessible sections. The average yield in recent years has been about 22,000,000 pounds, although it is estimated that the growing region of this island is capable of producing at least 110,000,000 pounds annually.

The tobacco crop of 1919-20 which promised to be very large did not come to expectations. It did not exceed 27,500,000 pounds falling about one million pounds under earlier estimates. The low yield was attributed to long dry spells although the area under cultivation was larger than the average.

It is estimated that about 75 per cent. of the tobacco crop of the Dominican Republic is grown in the Province of Santiago, 15 per cent. in the Province of Puerto Plata, and 5 per cent. each in the Provinces of La Vega and Espaillat. The annual yield of Dominican tobacco is, approximately, 11,000 tons, most of which finds a market in Europe.

Other Agricultural Products.

Cacao, coffee, bananas and castor bean are the principal agricultural products besides sugar and tobacco.

The society of apiculturists recently met in the city of Santo Domingo to discuss the needs of the beekeeping industry and to encourage measures tending to increase the production of honey in the Dominican Republic.

A project for the irrigation of the Banegas agricultural section has been taken under consideration. It is believed that with the necessary irrigation this territory could be made one of the most productive parts of the country for stock raising as well as farming.

With the object of experimenting with the cultivation of wheat an agricultural substation has been established in Constanza on land above 4,000 feet above the level of the sea. The first sowing was in February 1919, and monthly since that date.

There was a large yield of cocoa in 1919. The principal area devoted to this crop lies between Santiago, toward Moca, La Vega, and on to Sanchez, the port from which most of the cocoa from this State is shipped. The cocoa growers had a very prosperous year and recover from the poor year of 1917, when they had to accept as low as 5 cents a pound for their commodity.

Shipments of cocoa from the northern part of the Dominican Republic, to the United States for the last two years have been between forty and fifty million pounds annually. Exports to other countries have been reduced to a minimum on account of the lack of transportation.

The military government has declared an agricultural zone the territory composed of the section of Jamao and the Comun and Province of Moca comprised between the following boundaries: South to the summit of Cordillera Central range; east to the Arroyo Blanco river; north to Rico Jamao; and west to the Arroyo Frio river.

On September 20, 1918, the Government's agricultural experiment station at Haina, 17 kilometers from the city of Santo Domingo, was officially opened. A gift was recently made to the Department of Agriculture, of a tract of land near Puerto Plata for use as an agricultural experiment station.

Due to the fine results obtained by the department of agriculture in raising corn at an altitude of 1,200 meters, and to the many benefits to be obtained from raising the grain, it has been suggested that all the municipal governments that have high land in their jurisdiction give information and assistance to those interested in its cultivation.

A cooperative cacao society has lately been formed in San Pedro de Macoris to help the development of the industry. The society is departmental and has four subdivisions—at San Pedro de Macoris, Pimentel, Villa Rivas and Castillo. The San Pedro de Macoris subdivision has 10 sectional associations. The society will establish an experimental station near San Pedro de Macoris, where new scientific systems of cultivation, drainage, and farming will be tried. A stock-breeding station will also be established by the society to improve the live stock in the province.

MINERAL RESOURCES.

The military government of the Republic engaged the services of James R. Jones, of the Bureau of Mines at Washington, to carry out a radical change of the mining code.

Active exploration work took place recently and borings were made on petroleum lands, about four kilometers from the city of Azua, with the result that oil was found at a dept of 990 feet, the flow being estimated at 150 barrels per day. Other shafts were sunk in the vicinity, and it is proposed to drill much deeper in the hope of encountering a greatly increased yield of oil.

FOREIGN TRADE.

The foreign trade of the Republic for 1918 amounted to \$32,108,496 of which \$19,736,152 were imports and \$22,372,344 exports. Compared with the year 1917, these figures show an increase in imports of \$2,336,088 and a decrease in exports of \$72,236, or a net increase of \$2,263,852.

In 1916 it was \$33,192,303. The total value of imports in 1917 was \$17,581,814, as compared with \$11,664,430 in the preceding year, while the value of exports during 1916 and 1917 was \$21,527,873 and \$22,444,580, respectively.

Because of lack of transportation to Europe in recent years, the major part of the Dominican products have gone to the United States, the total exports amounting to \$21,500,000 in 1916, and to \$22,400,000 in 1917, an increase of 100 per cent. since the pre-war period. The value of the imports has risen proportionately, from \$8,000,000 in 1912 to \$17,500,000 in 1917.

Before the war the United States had 50 to 60 per cent. of the total foreign trade of the Dominican Republic, the remainder of the trade having been held by Germany, Great Britain, France, and Spain. In 1917 the United States took 80 per cent. of the Dominican exports, and supplied 82 per cent. of the Republic's imports.

The Dominican products exported to the United States in 1918, were:

Animals, \$10,897; Brass, fit only for remanufacture, \$62,921; Breadstuffs—Corn, \$966.

Chemicals, drugs, dyes, and medicines, \$22,697; Cocoa or cacao, crude, \$3,660,091; Coffee, \$184,305; Copper, in ore, etc., \$2,200; Copper and manufactures of: Pigs, ingots, bars, plates, and old, \$27,125; Cotton, and manufactures of, \$33,896.

Dyewoods, in crude state, \$122,712.

Fruits and nuts, \$101,600.

Hats, etc., and materials for, \$21,607; Hides and skins (except fur skins), raw or uncured, \$306,004; Hide cuttings, raw, and other glue stock, \$4,862; Honey, \$184,607.

India rubber, crude, scrap, etc., \$3,649; Iron and steel, and manufactures of, \$9,744.

Leather and tanned skins, \$24,734.

Salt, \$4,822; Sugar and molasses, \$734,021.

Tanning materials, crude: Mangrove bark, \$18,330; Tobacco, leaf, \$1,633,169.

Vegetables, \$51, 184.

Wax, \$148,353; Wood, and manufactures of, \$18,428.

The American products imported by the Dominican Republic in 1918, were as follows:

Agricultural implements, and parts of, \$119,535; Animals, \$7,958; Asbestos, manufactures of, \$28,883; Athletic and sporting goods, \$8,732.

Blacking (including shoe paste, etc.), \$13,408; Brass, and manufactures of, \$32,687; Breadstuffs, \$460,241; Bronze, manufactures of, \$7,310; Brooms, \$2,758; Brushes, \$9,721; Buttons, and parts of \$14,205; Bicycles, tricycles, etc., \$10,393.

Candles, \$7,139; Cars, automobiles, and other vehicles, \$210,746; Carriages, \$1,524; Cars for steam railways—freight and other, \$102,183.

Celluloid, and manufactures of, \$6,915; Cement, hydraulic, \$144,354; Chemicals, drugs, dyes and medicines, \$293,363; Chewing gum, \$7,115; Clocks and watches, and parts of, \$9,407; Coal and coke, \$169,497; Cocoa and chocolate, prepared, etc., \$9,429; Coffee, green, roasted, or prepared, \$4,788; Confectionery, \$82,312; Copper and manufactures of, \$57,239; Cork, manufactures of, \$3,026; Cotton, manufactures of, \$3,013,967.

Dental goods, \$3,093.

Earthen, stone, and china ware, \$156,861; Electrical machinery and appliances (except locomotives) \$187,287; Explosives, \$10,542; Fibers, vegetable, manufactures of, \$751,949; Fire clay, \$3,547; Fish, \$281,368; Flavoring extracts and fruit juices, 7,002; Fruits and nuts, \$70,269; Furniture of metal, \$37,435.

Glass and glassware, \$61,546; Glue, \$3,596; Gold and silver, manufactures of, including jewelry, \$162; Grease, \$18,404.

Hats, and materials for, \$54,164; Household and personal effects, \$20,206.

India rubber, and manufactures of, \$114,795; Ink, Printers' and other, \$10,791; Instruments and apparatus for scientific purposes, \$14,025; Iron and steel and manufactures of, \$3,853,427.

Lamps, chandeliers, and all devices for illuminating purposes, (except electric), \$14,367; Lead and manufactures of, \$5,933; Leather, and manufactures of, \$821,046; L'Yeather, imitation, \$4,480; Lime, \$7,151.

Matches, \$19,325; Meat and dairy products, \$509,537; Musical instruments, \$24,073.

Naval stores, \$4,723; Notions, not otherwise classified, \$10,742. Oilcloth and linoleum, \$12,572; Oils, \$672,578.

Paints, pigments, colors, and varnishes, \$120,370; Paper and manufactures, \$263,074; Paraffin and paraffin wax, \$6,514; Pencils (except slate) and pencil leads, \$6,968; Perfumery, cosmetics, etc., \$27,455; Phonographs, graphophones, gramophones, and records, and materials for: Phonographs, etc., records, etc., \$15,274; Photographic goods, \$25,742; Plated ware—gold, silver, and all other, \$17,126.

Refrigerators, \$5,206; Roofing felt and similar materials, \$25,543. Shoe findings, \$20,199; Silk, manufactures of, \$35,870; Soap, \$313,028; Spices, \$6,538; Spirits, wines, malt liquors, and other beverages, \$195,831; Starch, \$3,514; Stone, and manufactures of, 9,231; Straw and palm leaf, manufactures of, \$11,358; Sugar, refined, \$31,111; Surgical appliances (not including instruments), \$15,542; Suspenders and garters, \$19,248.

Tobacco, manufactures of, \$30,380; Toys, \$13,159; Trunks, valises, and travelling bags, \$5,072.

Umbrellas and parasols, \$27,963.

Vegetables, \$96,202.

Wagons, \$3,351; Wheelbarrows, push carts, etc., \$4,990; Wood and manufactures of, \$514,671; Wool and manufactures of, \$69,612.

The value of declared exports from Santo Domingo to the United States during the first half of 1919 amounted to \$2,666,350, an increase of \$539,896 over the figures for the corresponding period of 1918. With the exception of honey and molasses the sales prices of all commodities show an appreciable increase in value.

The remarkable increase in the value and quantity of hides and skins declared for export to the United States during the first six months of the present year is due to the removal of the American import restrictions which prevailed during the war.

The decline in the exportation of coffee to American markets is due to the stringent import regulations which became effective early in the present year and which have tended to divert this commodity to France, the principal pre-war buyer.

The principal articles, with their value, were as follows:

DOMINICAN REPUBLIC.

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To United States.

Articles	Values.	Articles.	Values.
Castor beans	\$6,149	Honey	\$7,678
Cocoa	226,101	Metals, old	737
Coffee	14,97	Molasses	3,745
Cotton	506	Rosin	17,335
Divi-divi	1,102	Sugar	2,147,672
Hides and skins:		Vanilla beans	574
Cowhides	97,138	Wax, "bees"	25,073
Goatskins	97,281	Other exports	3,773
Sheepskins	7,812	Returned American goods	9,677
Total			\$2,666,350

To Porto Rico.

Beans	\$11,981	Leather	7,637
Cocoa	2,779	Other exports	9,252
Corn	22,759	Returned American goods	9,677
Total			\$67,110

To The Virgin Islands.

Cigarettes	\$1,838
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The exports of automobiles to the Dominican Republic has increased very much in the last few years. In 1912 only 13 cars, including commercial and pleasure, were shipped to Santo Domingo, of a value of nearly \$13,000. During war years, owing to the lack of shipping facilities, the trade remained practically stationary, as only 12 cars, were shipped in 1914, and 30 in 1915. In 1916, however, the number of cars shipped jumped to 4 commercial and 131 passenger cars; in 1917, 22 commercial and 191 passenger cars were sent to Santo Domingo, and in 1918 the number of commercial cars was 21, and the pleasure cars were 148, with a value of nearly \$200,000. The total value of automobiles, accessories and motor cycles of American manufacture shipped to Santo Domingo in 1918 was \$273,918.

The largest item of increase in exports of American motor vehicles to the Dominican Republic has been passenger cars of moderate price. The shipments of motor trucks showed a noticeable growth in the last two years, and the exports of parts and motor cycles were fairly steady. About 680 automobiles have been shipped from the United States to the Dominican Republic since 1911. The American consul at Santo Domingo reported in December, 1918, that there were about 650 automobiles in use in that southern district. In the northern district of Puerto Plata 200 automobiles were estimated in March, 1919. As these are the principal districts with road facilities, it is probable that there are not more than 1,000 cars in the Republic.

The introduction of automobiles and the increasing trade of the Republic has led to an active interest in the extension of good roads. At present there are only about 150 miles of road available for motor travel. Three fine boulevards lead out from the city of Santo Domingo in different directions.

Automobiles, as well as other conveniences and luxuries, are popular with the native Dominicans, and also with the rather

large foreign colonies in the Dominican cities. The automobile market has been best in Santo Domingo, 30 different models being in use there, according to a recent report of the American consul. The buying power of the public promises to be larger as the crop outlook is better than usual.

There is in quite an extensive market for all kinds of shirts, from the cheap workingmen's shirts to the better class of fancy and silk garments. While there are a few small factories engaged in the manufacture of moderate-priced shirts, the great bulk of this class of goods is imported from the United States.

CUSTOM REGULATIONS.

Four copies of the consular invoices and four copies of the bills of lading must be presented by the shipper for consular certification. The invoices should be made out in Spanish and must contain the names of the shipper, captain, consignee, importer, ports of shipment and destination, also name of steamer, and its nationality, and the mark, gross and net weights, contents, kind, and value of each package. A separate invoice is required for each consignment, and for each mark, even when applied only to a part of a consignment. Packages of uniform contents, weight, form, mark, and number may be included in one item in the invoice.

The bills of lading must show the marks, numbers and gross weight of packages. Shipments of firearms, ammunition, etc., require a special government permit. Shipments must not be consigned "to order." The consignee can claim goods upon presentation of the consular invoice, and to protect the shipper it is a common practice to consign shipments to banks or to shippers' agents, so that the shipping documents are not turned over to the ultimate consignee until his acceptance of the draft.

The consular fees for certification of invoices are payable at the port of entry at the following rates: Invoices \$50 or less in value, \$1; \$51 to \$200 in value, \$2; \$201 to \$1,000 in value, \$3; \$1,000 to \$2,000 in value, \$4; \$2,001 to \$4,000 in value, \$5; over \$4,000 in value, \$5, plus \$1 for each additional \$1,000 or fraction thereof. Invoice blanks are sold by the consulate at 10 cents the set of four, the small form and 15 cents the set of four, the big form.

An executive decree of February 16, 1918 provides that wharfage dues shall be assessed and collected at each port of entry, unless waived in accordance with the law, on all articles imported from abroad landed on a wharf owned by the government, at the rate 10 cents per 100 kilos gross weight, and if not landed on a government wharf at the rate of 2 cents per 100 kilos gross weight; on articles exported over a government wharf at the rate of 5 cents per 100 kilos gross weight, and on articles exported which do not pass over a government wharf at the rate of 1 cent per 100 kilos gross weight. Coastwise shipments over government wharves, 2 cents per 100 kilos.

The Dominican Republic has consuls at: Baltimore, Md.; Boston, Mass.; Chicago, Ill.; New York, N. Y.; Philadelphia, Pa.; San Francisco, Cal.; Wilmington, N. C.

CUSTOM TARIFF.

A commission was created in 1919 under the name of "Dominican Tariff Commission" for the purpose of revising the Dominican customs tariff. The commission was directed to submit its report not later than September 1, 1919, in such form that the new tariff would be published not later than October 1, 1919, to become effective on January 1, 1920.

The new tariff added a considerable number of items to the free list, including machinery and implements intended for the agricultural and industrial development of the country, and also reduced the duties on certain articles of prime necessity. The new tariff is more favorable to American exporters, in general, than the old one. The commission was composed of the following members: President, J. H. Edwards, deputy receiver general; Sres. Alfredo Ricart, president of the chamber of commerce of Santo Domingo; Julio Senior, special customhouse inspector; R. Alburquerque, auditor of the customhouse of Santo Domingo; R. H. Worfeld, of Washington, D. C.; and secretary, Sr. Luis E. Lavandier, official translator of the general customhouse receivership.

The Dominican tariff of 1919 has been amended to read as follows: "The importation of kerosene of less than 150° fire test is forbidden except when imported by the National Government, by a municipality, or by private parties for exclusive use as fuel. When imported shall furnish a bond amounting to double the value of the quantity imported. This bond will be forfeited, without requiring any legal formalities, should the kerosene imported exclusively for fuel purposes be used for illumination purposes by the importer or by any other person."

FINANCE.

In the budget for 1919, general receipts were estimated at \$7,973,000. The expenditures are distributed in the following manner: Interest and payment of the Dominican loan, interest and payment of the debt of 1918, appropriation for public instruction, expenses of the municipal government, public works and reserve fund, \$3,550,500; legislation, \$8,280; executive department, \$28,360; judiciary department, \$558,630; interior administration and police, \$1,175,095; foreign relations, \$65,583; commerce and finance, \$487,304; justice and public instruction, \$462,500; agriculture and immigration, \$198,545; public works and communications, \$532,516. The figures of receipts and expenditures show a surplus of \$33,686.

The revenue collected by the customhouse of San Pedro de Macoris was \$485,529 gold for the first seven months of 1919, collected as follows: January, \$42,879; February, \$75,302; March, \$71,021; April, 71,261; May, \$60,741; June, \$63,467; July, \$100,858.

The Internal Revenues of the Government during the first five months of 1919 amounted to \$762,505. The collections by months were as follows: January, \$122,099; February, \$124,734; March, \$168,836; April, \$140,307; and May, \$206,529. Of these

revenues \$261,509 were collected on alcohol. The internal revenues of the City of Santiago during the first six months of the present year were \$243,005.

A recent governmental decree established a municipal tax of 4 per cent. on the amount of lawful wagers made in the hippodrome of the commune of Santo Domingo, or in any other sport in which the law authorizes betting.

On April 10, 1919, the military government passed a property tax law which went into effect July 1. The law levied a tax on permanent improvements to property and on land.

Owing to the fact that the law concerning concessions for state properties, passed June 5, 1905, has not met requirements satisfactorily, the military government of the Republic has declared its suspension until a new law may be promulgated.

According to decree issued recently the municipalities having exceeding 10,000 pesos annually shall set aside not less than 15 per cent. of such receipts for sanitation.

The amount expended for repairs of public buildings during the period between July 1, 1917, and November 30, 1918, totaled \$84,963.39. During the same period \$2,960.85 was used in the repairing of wharves and \$18,774.56 in the establishment of the agricultural station at Haina.

DEBT.

The foreign debt in 1917 was as follows:

Five per cent. Customs Administration Sinking Funds Gold Bonds of 1908 Authorized amount	\$20,000,000
Amount issued to December, 1917	17,779,950
Less redeemed	4,093,750
	\$13,686,200

According to data furnished by the secretary of the Dominican Claims Commission, relating to its work since its organization in 1917, the number of claims settled from that date to June 30, 1919, aggregates 2,279 valued at \$1,152,619. The number of claims rejected were 348, valued at \$874,669.

At the beginning of July, 1919, the National Bank of Santo Domingo informed the public that it would buy 5 per cent. interest-bearing bonds of the Dominican Government of the issue of 1918 of the following denominations: \$1,000 bonds, \$500 bonds, and \$1000 bonds.

In July, 1919, a plan was adopted by the terms of which bonds to the amount of \$5,000,000 were to be issued by the government, the proceeds to be used in the liquidation of the claims already awarded by a special commission appointed for that purpose, and for some other expenses. The bonds were to bear five per cent. interest, dated back from January first, 1918. The bonds will mature in 1933, but the bonds would be gradually paid by annual drawings. For this loan the consent of the American government was necessary according to the terms of the convention of 1905 by which the United States took charge of the finances of the Dominican Republic.

On the first of August, 1919, a contract was made by the Government with the International Banking Corporation of New York City, whereby the latter becomes the Government Depository. The bank engages to maintain some 40 branches in the towns designated by the Government, and to receive deposits and honor checks of the Government; to pay an annual interest of $2\frac{3}{4}$ per cent. on the daily balance of the current account as it appears on the books of the main office of the Bank of the Republic, and a 4 per cent. interest on special deposits for a period to be fixed by the general accounting section of the treasury. Moreover the bank is obliged to maintain a reserve of no less than 20 per cent. of funds to be checked against, and no less than $12\frac{1}{2}$ per cent. of temporary deposits, whether of the Government or other depositors. The Government promises to pay the bank for its services a commission of $\frac{3}{4}$ of 1 per cent. on the total taxes collected and deposited every month by the general accounts of the treasury, including the amortization fund of the Dominican Republic, issue of 1918.

BANKING.

On July 1, 1897 the American gold dollar was adopted as money unit. There is no Dominican gold or paper in circulation.

The National Bank of Santo Domingo was established in 1892 with a paid up capital of \$500,000. The Royal Bank of Canada has branches in the principal towns. The International Banking Corporation of New York has four branches.

The Territorial and Agricultural Bank opened recently for business in the national capital.

During 1917 the International Banking Corporation established branches in Puerto Plata and in the most interior town of Santiago de los Caballeros, the trade center for the northern half of the Dominican Republic.

The 7-mile branch completed by the Samaca and Santiago Railroad between Moca and Salcedo links that railroad with the Dominican Central Railroad and connects the ports of Sanchez and Puerto Plata by rail. A cut-off three miles long between Barrabas and La Sabana was completed by the Dominican Central Railroad, which is owned and operated by the Government. The grade is thus reduced from $9\frac{1}{2}$ to 3 per cent. and the maximum curvature to 32° . The new line is laid with 60-pound American rails, all stone ballasted. Bridges and culverts are of reinforced concrete. The change will greatly reduce the cost of operation and maintenance, and the train tonnage will be increased fivefold.

By an Executive decree of the 21st of February last the military Government established the following modifications in the commercial code of the Republic: Companies heretofore denominated *compañías anónimas* (corporations) will hereafter be known as *compañías por acciones*. Such companies as desire to change their names in accordance with the new nomenclature will do so in conformity with the statutes of the code which stipulate the method for making changes in names of corporations. The *compañías por acciones* may adopt whatever names

the partners choose, providing that no company by the same name has been established already, and providing it contain the term *compañía por acciones* or the letters C. por A. The names of companies of limited partnership shall contain the letters C. en C. por A. In announcements and advertisements, *compañías por acciones* or companies of limited partnerships will use their legal names as well as the ones by which they are generally known, and if they have exercised the prerogatives granted by the code they shall add the words "De capital variable" (variable capital). All *compañías por acciones* and companies of limited partnership are to be regarded as commercial, whatever may be their object as set forth in their rules and by-laws.

Banking Holidays.

January 1, New Years' Day; January 6, Epiphany; February 27, Founding of the Republic; April 1, Holy Thursday, April 2, Good Friday; May 13, Ascension Day; June 3, Corpus Christi; June 29, St. Peter and St. Paul; July 7, Memorial Day, August 15, Assumption; August 16, War for Independence; September 24, Las Mercedes, October 12, Discovery of America; November 1, All Saints' Day; December 8, Immaculate Conception—December 25th, Christmas Day. As October 12 falls on Sunday, the following Monday will probably be observed.

SHIPPING.

The merchant marine consists of one small steamer and 28 schooners the largest of which is of 193 tons.

In 1918, 863 ships, with a tonnage of 618,567, entered and sailed from the ports of the Republic as against 1,168 ships, with a tonnage of 1,006,511, during the previous year. According to nationality, the classification of these vessels was as follows: American, 508; English, 50; Norwegian, 16; French, 14; Spanish, 2; Cuban, 47; Dominican, 175; other nationalities, 51.

Of the ships arriving and sailing during 1918, 624 were steamers and 239 sailing vessels.

During 1918 the coastwise trade was carried on by native ships in competition with foreign ships. The following entries of foreign ships in ports of the Republic were registered; Foreign ships, 365, with 486,266 registered tonnage, of which 82 were sailing vessels and 283 steamships. According to the classification of the customs they carried in coastwise trade 45,347 packages, of which 11,061 were foreign products and 34,286 native products. The national vessel which carried on the same coastwise service registered 7,658 port entries, of which 6,931 were sailing vessels and 726 steamers. The native shipping carried 1,227,209 packages, of which 212,451 were foreign products and 1,041,758 native products. Sailings in the different national ports were registered as 7,572 ships, of which 6,847 were sailing vessels and 725 steamers. Comparing these figures the grand total of national and foreign ships entering and sailing from ports of the Republic and running in coastwise trade were: Sailing vessels, native, 6,931; foreign sailing

vessels, 82; native steamers, 727; foreign steamers, 283; total 8,023, ships. The tonnage registered at the various native ports was as follows: San Pedro de Macoris, 2,767 ships, with 226,874 registered tonnage; Sánchez, 549 ships, with 97,387 tonnage; Puerto Plata, 787 ships, with 96,371 tonnage; and Santo Domingo, 854 ships, with 79,130 tonnage.

The Latin-American Steamship Line of New York has established a service of freight and passenger steamers between the ports of the United States and the Dominican Republic and Colombia.

A wharf built of reinforced concrete was finished and opened to traffic in Puerto Plata, at a cost of about \$150,000. It is 400 feet by 96 feet, and has an approach 800 feet long. There is a depth of 20 feet alongside which will accommodate two vessels, one at either side.

RAILROADS.

The country is not well supplied with roads. There are two railways one is the Samana to Santiago, with branches, having a total mileage of 95 miles, and the other, owned by the Government, runs from Puerto Plata to Santiago and Moca, and is sixty miles.

During the last quarter of 1918 the traffic and freight movement of the Dominican Central Railway reached a total of 11,090,545 kilograms of merchandise and products transported.

The first section of the Eastern Highway has been entirely completed. It is 16½ kilometers long, and connects the city of Santo Domingo with San Pedro de Macoris.

The receipts and expenditures of the Dominican Central Railway were \$487,657 and \$295,765, respectively, in 1918, compared with \$381,824 and \$271,988 in 1917. The profits of 1918 were \$191,894 and of 1917, \$109,836.

Several capitalists of the United States are interested in the project of constructing a railway which, extending from the port of Manzanillo harbor, shall traverse the northwestern territory, passing near Santiago and along the southern part of the Yaque and extending nearly to the pines region, terminating at La Vega.

POST & TELEGRAPHS.

The telegraph lines have a total length of 352 miles. There are 92 post-offices, and telephone offices.

Two small wireless stations at La Romana and San Pedro, opened to the public.

The naval radio stations at Santo Domingo City, Dominican Republic, and Port au Prince, Haiti, were opened May 1, 1919 to commercial service for points in the United States via the Naval Radio Station at Guantanamo, Cuba, and thence via cable from Guantanamo to destination. The same routing apply on traffic field in the United States for delivery in the immediate vicinity of Port au Prince or Santo Domingo City.

The rates governing this traffic are the usual cable rates

between points in the United States and Guantanamo, plus \$0.20 per word between Guantanamo and Port au Prince or Santo Domingo City.

The postal and telegraph systems of the Republic hitherto under separate management, were consolidated January 1, 1919.

Telephonic communication between Haiti and the Dominican Republic has been established.

The military Government has declared the telephone industry throughout the Republic a public utility, and has appropriated through the secretaryship of industry and communications the sum of \$200,000 gold, for the installation of a telephone system in the city of Santo Domingo and a telephone and telegraph line between that city and Cibao.

PUBLIC WORKS.

A recent executive decree authorized the general accounting section of the Treasury to deposit the sum of \$521,928 in the bank designated by the Dominican Government in the city of Santo Domingo, to be used as a special fund for public works of the Dominican Republic. This fund and the accrued interest will be at the disposition of the Department of Public Works to pay for undertakings duly authorized by the Government.

The charitable society, "Padre Billini," of Santo Domingo, has been authorized by the Government to contract a loan of \$15,000 gold, with an interest not to exceed 10 per cent., to enlarge and improve the insane asylum of that city.

Funds to the amount of about \$75,000 have been provided for the construction of a bridge over the Yaqui River. The completion of the bridge and the opening of same to traffic will be a great factor in developing the country in the neighborhood of Monte Cristo.

Construction work has been commenced on the important highway from Sabana de la Mar to Hato Mayor. This road will connect with one which is being built from the last-named place into the district of Cibao, thereby putting that region in direct communication with the rest of the Republic.

Sixteen and half kilometers of macadam highway between the city of Santo Domingo and Los Alcarrizos have been completed, as well as 50 kilometers of the road between Monte Cristo and Santiago. The macadam section of the national highway between La Vega and Moca was built under contract. The section between Santiago and Navarrete, which is being constructed by the Government out of macadam and gravel is about to be completed as this book goes to press.

A bridge over the Camu River at La Vega was recently opened to public traffic, thereby placing that progressive city in easy communication, via Sánchez, with the coast.

A weather station established in Puerto Plata by the United States Weather Bureau is one of a system of 20 maintained by the bureau in the Caribbean Sea.

A wagon road is being completed between Puerto Plata and Santiago at the expense of the municipalities involved. The road will cross the North Ridge, traverse the fields about San-

tiago, cross the Yaque River on a bridge, and terminate at Janico in the Central Mountain Range. It will be 72 kilometers long, 42 of which are already completed and opened for traffic.

A commission of engineers has been appointed to supervise the construction of the aqueduct of Santo Domingo. The cost of the undertaking will be, according to estimate, \$1,036,595, gold. It is the most important public work yet undertaken in Santo Domingo.

LIST OF DEALERS.

The principal dealers in the city of Santo Domingo are:

Importers and Exporters.

F. Aguilar; J. B. Alfonseca, Comercio; A. Aybar y Co., Atarazana 12 y 13; Armando Buñols, Separación; M. Calero y Co., Consistorial núm. 75; M. Campillo hijo, Atarazana 4, y Mercedes; J. Cámpora, Separación; J. Cassá, Arzobispo Meriño y Comercio; E. Cohen y Co., Separación; P. Díaz, Atarazana.

Leather Goods.

Ricardo Alvarez, Separación 103; Ceara y Mejías, General Cambiázo; Garrigosa y Co.; F. J. Lugo, Separación 81; R. Piñeiro y Co.; Marcos Polanco, Consistorial 78.

Druggists.

Abelardo M. Piñeiro, La America, Santo Tomás; Del Asilo Bilini; José Mieses, Sucr. Central Separación; B. Goussard, Francesa, Mercado; Rafael E. Galvan, La Legalidad, Separación; Alvaro Logroño, La Fé, Separación; Alfredo Rodríguez, Las Mercedes, Separación; F. Baehr, La Nacional, Comercio; Diógenes Mieses, Nueva Separación; Juan Velazquez, San José, Separación.

Novelties.

Ch. León; J. M. Leyba y Co.; Francisco A. Palau; L. Pardo; Miguel Pou y Co.

Hardware.

Bañero y Co.; La Industrial y Comercial; P. L. Nadal.

Booksellers.

Roques y Polanco, La Cuna de America, Separación esq. a Duarte; García y Félix; J. R. Vda. de García, Separación 15; Federico Henríquez, Comercio 36; Félix E. Mejía, Separación 35; Constantino Suarez Gómez, Mercedez 20.

Watches and Clocks.

Ulises Albino; Ellis Geraldino; Manuel Medina; Prota y Co.

Dry Goods.

Adolfo Cabral; Juan Elmudesi; Hnos. Elus J. C. García; Jesús M. Gomez; Manuel de J. Gomez, Marcos A. Gomez; Antonio Guzman; José Menendez y Co.; Pedro Nadal.

Shoes.

A. Batista; M. Matto; D. Perez.

A partial list of merchants of Monte Cristo is:

Importers and Exporters.

Augusto Arzeno; J. Arzeno e hijos; A. Barrera; J. M. Battle y Co.; Brugal y Co.; Miguel Caba; M. A. Cisneros; Gomez Dacosta; Ciriaco Dioanna y Co.; Jorge de Lemos; C. H. Loinaz y Co.; J. Marchena y Co.; S. Michelena y Co.; Hnos. Papaterra; J. E. Pimentel; C. M. Puyans; J. Simon y Co.; Sergio Toro; Vinelli y Co.

The merchants of San Pedro de Macoris doing import and export business are:

W. Biederman; S. de F. Castillo; F. Elhers y Co.; S. de F. Forreccio; Claning y Helm; F. Hult; R. Pasques; O. Reyes; E. Rijo; J. C. Robles; M. de Soto; E. Valdes; Vidaurra Muñoz y Co.

ECUADOR.

The Republic of Ecuador is a little larger than the State of Arizona; but its population is seven times bigger, being as thickly populated as Florida. Its area is about 116,000 square miles (300,440 square kilometers), and its population, estimated in 1911, is 1,500,000, equal to 13 per square mile.

Following are the territorial divisions of the Government, with their capitals and populations:

Province	Population	Capital	Inhabitants
Azuay	132,400	Cuenca	30,000
Bolívar	43,000	Guaranda	6,000
Cañar	64,000	Azogues	5,000
Carchi	36,000	Culcan	4,000
Chimborazo	122,000	Riobamba	18,000
Galápagos	500	San Cristobal	300
Guayas	98,000	Guayaquil	75,000
Imbabura	68,000	Ibarra	10,000
León	60,000	Latacunda	15,000
Loja	66,000	Loja	10,000
Manabí	64,000	Portoviejo	10,000
Oriente	80,000	Archidona	5,000
Oro	32,000	Machala	5,000
Pichinba	205,000	Quito	60,000
Los Rios	32,000	Babahoyo	5,000
Tungurahua	103,000	Ambato	10,000

The Galapagos Islands about 730 miles (1,175 kilometers) off the coast, have an area of 2,400 square miles (6,216 square kilometers), and a population of a little over 500.

The capital is Quito with about 70,000 inhabitants, situated among the mountains at an elevation of 9,371 feet (2,856 meters) on a fertile plateau. The largest seaport of Ecuador is Guayaquil with 100,000 population.

Ecuador, under the present constitution, promulgated December 23, 1906, is a centralized Republic, with legislative, executive, and judicial branches. Foreigners enjoy the same guarantees and civil rights as the citizens. Women have the free administration of their property even after marriage. Aliens may acquire property, also public lands, and may establish banking institutions under the same conditions as Ecuadorians.

The National Congress consists of the Senate, and Chamber of Deputies. The Senate is composed of 32 members, 2 for each Province, and the Chamber of Deputies of 48 members, 1 for every 30,000 citizens or fraction over 15,000. Senators, as well as deputies, are elected by direct vote; every citizen over 21 years of age who can read and write being entitled to vote.

Senators are elected for a term of four years and deputies for two years. Congress meets at Quito, on August 10 of each year for a period of 60 days, which may be extended for another 30 days. When deemed necessary or expedient, the President of the Republic may also call an extraordinary session.

The President is elected for a term of four years, by direct vote, and cannot be re-elected except after a lapse of two terms. According to the constitution of 1906, in case of the death or disability of the President, the President of the Senate of the Chamber of Deputies, in their respective order, exercises the executive power. There is a council of state, in addition to a cabinet consisting of five ministers, appointed by the President, which is consulted by him in all important matters, and which represents Congress when not in session. It consists of the cabinet, the president of the Supreme Court, the president of the Court of Accounts, two senators, two deputies and three other citizens, the last seven members being elected by Congress.

At the present time, the President is Dr. Alfredo Baquerizo Moreno, who assumed office September 1st, 1916.

Don Augusto Aguirre Aparicio, ex-minister plenipotentiary of Ecuador in Chile, was appointed Minister of Foreign Relations in March, 1919.

A treaty of amity, commerce, and navigation was concluded in the city of Washington on August 26, 1918, by representatives of the governments of Ecuador and Japan.

On March 31, 1919, the exchange of ratifications of the treaty of friendly relations, commerce, and navigation was made between Japan and Ecuador. The treaty was arranged in Washington August 26, 1918, and was promulgated in Ecuador on July 22, 1919.

Commissions from the governments of Colombia and Ecuador met at Cartagena, Colombia, on June 9, 1919, and signed for their governments a treaty defining the boundaries between the two countries. This matter had been in dispute for several years.

Congress has enacted a law authorizing the negotiation of a loan the proceeds of which is to be used in purchasing and installing an electric light and power plant at Pelileo.

MINERAL PRODUCTS.

Ecuador has been divided by nature into three distinct regions, the coast, the Montaña, and the Oriente, or eastern slope of the Andes, embracing the headwaters of many of the most important tributaries of the Amazon. Of these three regions, the coast is probably the most important commercially. Its metropolis, and practically the only important port of Ecuador, is Guayaquil. Much of the coast region is overflowed during the wet season, which commences usually in December. The Oriente, though perhaps richer in possibilities than any or all of the other portions of the country, is wholly undeveloped, and accessible only to expeditions specially equipped for exploration of the wilderness.

The inter-Andean region of Ecuador, except a small portion

south of Cuenca is something less than 250 miles long, and is from 8,000 to 12,000 feet above the sea, from which it is separated by the very difficult western chain of mountains, pierced by gorges, with such precipitous walls and so rugged as to be impracticable as outlets for railroads, wagon roads, or even trails. With the exception of one railroad of recent construction there are nothing but trails as means of access from the coast to the valley-plateau.

As far as known, this region is without valuable mineral deposits, though an inferior grade of coal and what seems to be a good quality of kaolin and marble are found in the southern part of Azogues. It must be borne in mind, however, that the country has been prospected only to the most limited extent, and as it is known that many of the rivers of the Oriente are auriferous, it is possible that the eastern of the two ranges that bound the valley will be found to be goldbearing when they will have been more thoroughly explored.

The manganese mines of Ecuador, which are becoming known in the United States as a number of shipments of the product have been sent there recently, are located near the town of San Antonio, Province of Pichincha, Ecuador. The claims cover an area of about 1-1/3 square miles.

The principal deposit consists of a blanket vein of manganese 3 to 9 feet thick, and an extension of some 21,000 square feet, a portion being exposed. Samples from many other deposits in the vicinity, of undetermined extent, appear to be of equal quality, from which it is assumed that the available quantity of ore reaches many thousands of tons.

Work was begun at the principal deposit in February, 1918, with a limited force and in a primitive manner, about 5 tons being the daily output with 10 men working. The ore extracted was dried in the open air and bagged for export, resembling gravel in appearance.

An assay made in New York, showed these products were present in the following percentages: Manganese, 46.36; iron, 1.55; copper, .02; phosphorous, 14; silica, 6.44. Other samples showed 53.2 per cent. of manganese; some have a higher percentage of silica, and still others show limestone. The small quantity of phosphorus is remarkable.

Gold seems to be the only mineral of commercial importance, at the present time, although copper, quicksilver, iron, lead, and platinum all exist in unknown quantities. Petroleum has also been located.

The Zaruma mines, in Southern Ecuador, are the best known. They were discovered by Spaniards in 1549, since which time they have been worked in a haphazard, spasmodic manner. During the early part of the nineteenth century a large population was supported by the mines. In the latter years the gold production decreased and the importance of the industry steadily declined.

English and French companies have in later years worked important mines in the district, including the Compañía Mineral Nacional Félix, formed in France in 1889 and the Zaruma Gold

Mining Co., of Great Britain, formed in 1880, with a capitalization of 250,000. The Compañía Exploradora was also a factor in the field. The Zaruma company has been reorganized. The present Zaruma Mining Corporation was registered in 1913 with a capitalization of 110,000 preferred and 10,000 deferred stock. The South American Development Co., seems to be one of the few companies carrying on mining operations.

There are copper deposits in the Department of Loja. A little mining has been carried on without success.

Because of the successful development of petroleum-bearing zones in Peru and the fact that oil deposits are known to exist in Colombia and Venezuela, attention has been directed to Ecuador. Bituminous seams in which fair quantities of petroleum have been found to exist have been variously located in the northern portions of the Republic. In El Oro also, not far from the boundary with Peru oil has been located, this field holding very good prospects, it is claimed. Santa Rosa is the town nearest to this prospective petroleum field.

The principal oil deposits thus far located in Ecuador lie about 90 miles southwest of Guayaquil.

At the present time the method employed in collecting the petroleum, about 25,000 barrels of which are secured annually, is to dig small holes to a depth of not more than 50 feet down to the impermeable sandstone. The life of these "wells" is anywhere from three months to three years.

Most of the oil concessions are held by Ecuadorians. In 1910, an Anglo-French company known as the Ancon Oil Co., with 250,000 authorized capitalization, of which 81,060 has been subscribed and fully paid up, was incorporated to acquire five oil claims of 800 acres each. The well on the Ancon property has been sunk to the depth of approximately 2,180 feet, and an agreement has been entered into with another company, the Ecuador Drilling Co., for assistance in carrying on the work.

NEW OIL LEGISLATION.

A new oil decree was issued by President Baquerizo Moreno, on January 20, 1920, concerning petroleum mines. The decree was issued in conformity with law passed by Congress on October 18, 1919, by which the President was authorized to determine the taxes which should be paid for the exploitation of petroleum deposits.

The most essential features of the decree are as follows: During the year 1920, the oil wells in operations shall pay to the Government 6% on the gross production, as licence fee. Oil fields not in actual operation shall pay as any other mining property. Wells in operation are required to be registered at the office of the Government of the Province in which they are located. The office will issue licence for the extraction of the number of gallons of oil in proportion with the tax paid. Any oil extracted in excess of the amount shall be considered a contraband. No well shall be permitted to be in operation without being previously registered at the Government office.

AGRICULTURE.

Ecuador has a treasury of wealth in her cacao groves.

Ecuador produces about 20 per cent. of the world cacao crop, and is probably the largest individual producer of this bean among the nations. It forms about 80 per cent. of the nation's exports. It gives Ecuador its principal buying power.

The Association originally organized for commercial purposes in connection with the purchase and sale of cacao, has become a quasi public association.

One of the principal companies engaged in the development of natural resources in Ecuador is the Asociación de Agricultores del Ecuador (Cocoa Planter's Association of Ecuador) (Cooperative Society).

The income of the Society is derived from a tax of three sucres per quintal on all cocoa exported from the Republic of Ecuador.

With the cancellation of the enormous debt of nearly \$5,000,000 contracted by the Agricultural Association owing to the depreciation in the price of cacao, the finances of that organization are becoming very satisfactory, which is having a beneficial effect on the commerce of the country.

Since practically all the cacao produced is exported, the exports of cacao, as shown under Foreign Trade will give an accurate idea of the annual production.

Owing to the bad effects of disease on Ecuador's cacao plantations, which has been of sufficient importance to cause the growers to employ an expert to study the situation, special interest has been aroused in all branches of agricultural education. One immediate result of this interest has been the reorganization of the agricultural school at Ambato. By a recent decree the school is placed under the general supervision of the Ministry of Education and more directly under the Director of Agriculture. Funds for its support are provided, and students are not only not required to pay for their tuition but receive wages.

The coffee crop in 1919 was very small. In consequence the price rose to about 30 cents gold a pound, f. o. b. Guayaquil.

The director for the development of agriculture is arranging for perennial live-stock fairs at the principal centers throughout the Republic, to include all animals related to agriculture. The boards in many of the cantons have agreed to cooperate in the movement.

Cantonal committees charged with the encouragement of agriculture and industry throughout Ecuador are established by a law recently passed by Congress. The Minister of Agriculture will have supervision over these committees, whose activities are principally the construction of roads, the canalization and cleaning of estuaries, the providing of water for irrigation, the gathering of statistics of agriculture and industry, enforcement of the labor laws, protection of the Indian race, and all other branches that have to do with the stimulation and development of agriculture and national industries. Funds for the

committees' use are to be derived from taxes, especially taxes under the public-highway law.

The cantonal committees are empowered to negotiate loans (guaranteed by taxes) for the carrying out of their work, such loans to first receive the approval of the executive authorities and be notified by the Governor of the Province. Machinery, tools, seeds, and other supplies imported by these committees for the advancement of agriculture will not be subject to fiscal or municipal taxes.

Samples of silk flower from Guayaquil were introduced in the United States by Frederick W. Goding in December 1918. The plant called "flor de seda," or silk flower, is a small rapid growing plant. The product resembles kapok but is much superior in all textile qualities, as it is finer and more brilliant. It is locally used in the manufacture of mattresses, not being separated in the local market from kapok. Silk flower has great future commercial and industrial possibilities, and would well repay scientific investigation and experiment.

Peonage has been abolished in Ecuador through a legislative decree of October 20, 1918, which also ends imprisonment for debt. Prior to this decree a peon was compelled by law to remain on an estate as long as he was indebted to the owner, who arranged that the peon was always owing more than he could pay, a condition that was practically slavery. The decree also forgave all debts owed by peons, thereby making their emancipation complete.

The cotton plant grows wild throughout the lowland region of Ecuador. Kopak and other fibers from various cotton-producing plants are gathered for the market in limited quantities, but the wild cotton extending over enormous areas is entirely neglected. Although some cotton has been cultivated in Ecuador since 1904, the low prices received discouraged the people from extending their acreage until 1916 when the price became very attractive owing to war conditions, and several new textile factories were established in the interior. The prices offered for cotton caused the farmers to increase the production which, however, was not sufficient to supply the demand, and importations were made from the United States and Peru. In 1918 the production exceeded the consumption so that 137 tons were exported to the United States and to England.

The crop for 1919 was about 3,600 tons.

INDUSTRIES.

Industrially, Ecuador is still to be developed, although some progress has been made in the last few years. There are eight textile mills, one a woolen, and seven cotton. In the Province of Pinchincha there are four factories; in the Province of Imbabura, two; in the Province of Tungurahua, one; and in the Province of Chimborazo, one. Two plants in Chillo Valley, a woolen and cotton mill, both operated by the same company, produce cotton and woolen goods, including bedspreads, towels, underwear, hosiery, shirts, scarfs, white piece goods, and flannel. Most of the goods, especially the white goods, are made to cater

to the poorer trade and therefore not of a very fine quality.

These mills consume annually about 608,400 pounds of cotton and 202,800 pounds of wool. Most of the wool is obtained in Ecuador, but the cotton is imported, chiefly from Peru. The yearly production of the cotton mill is approximately 600,000 yards of cotton cloth and 5,000 shawls. The woolen mill turns out about 70,000 yards of woolen cloth and 6,000 shawls each year. Practically all the output is sold in Ecuador; however, a small percentage is exported to Colombia.

Another establishment, also located in the Chillo Valley, about 9 miles from Quito, produces cotton goods exclusively, such as towels, thread, handkerchiefs, underwear, hosiery, and white piece goods. All the cotton used is native grown and amounts to about 30,420 pounds per month.

Manufacturing will be the next of Ecuador's national industries to be developed on a larger scale. The smaller factory of primitive design is giving place to more modern installations.

Of recent years there are textile mills in operation at Quito, Ambato, Riobamba, and Guayaquil. There is a big modern shoe factory at Guayaquil, with more than 100 employees, which is making about ten thousands pairs of shoes per month, and there is a big ricehulling mill which will soon be in operation, while a very modern cotton mill has just been inaugurated at Riobamba for the manufacture of "ponchos" and other clothing. There are several old-time flour-mills in the country.

In the Province of Manabi, Ecuador, the straw hat, called the "Panama" is manufactured. It is called "jipi-japa" by the natives. The most skilled hat weavers are women and children, although men are sometimes found with sufficient deftness of fingers to be successful in the art. The famous Montecristi and Santa Ana brands come from the Provinces of Manabi and Guayas, Ecuador. Large quantities of toquilla straw are exported to Piura, Peru, there to be made up into a special style head covering.

An Ecuadorian firm has started a cheese factory in the Province of León.

In June 1919, a factory for the manufacture of cigarettes and matches was opened in Quito, as well as a factory for the production of alcohol from potatoes. Both these industries give promise of becoming very productive.

An executive decree of July 5 last provided for the establishment of permanent exhibits of Ecuador's agricultural and manufactured products in the consulates of the Republic. These exhibits are for the purpose of propaganda. They are entirely under the control of the consuls. The principal articles on exhibition are cacao, coffee, rubber, tobacco, vegetable ivory, lumber, chocolate, and toquilla straw hats, known commonly in the market as "Panama" straw hats.

FOREIGN TRADE.

The growth of Ecuador's commerce during the ten years between 1907 and 1916, inclusive, has been gradual, showing a

uniformly favorable balance of trade. The following table shows the foreign trade in ten years, in Ecuadorean money.

Year	Imports	Exports
1908	\$9,989,599	\$12,907,774
1909	9,090,262	12,091,096
1910	8,007,629	13,638,308
1911	11,489,104	12,692,237
1912	10,354,564	13,689,696
1913	8,836,689	15,789,367
1914	8,402,767	13,061,566
1915	8,408,143	12,895,069
1916	9,330,171	17,569,691
1917	10,194,789	16,337,886

The products exported from Guayaquil during 1918 were (in Ecuadorean money).

Achiote, \$3,397; Brooms, \$20,753; Cabulla fiber, \$2,685; Cacao, \$11,445,043; Castor beans, \$596; Chocolate, \$22,233; Cinchona bark, \$16,429; Coffee, \$1,014,602; Condurango bark, \$1,660; Cotton, \$121,083; Cottonseed, \$3864; Cow hair, \$17; Gold products, \$691,551; Hammocks, \$2,168; Hammock straw, \$34,064; Hats, Panama, \$684,799; Hides: Alligator, \$1,097; Calf, \$413; Cattle, \$366,343; Hog, \$389; Llama, \$155; Sheep, \$25,866; Other, \$5,672; Ivory nuts, \$3,012; Leather, sole, \$19,445; Lumber: Oak, \$2,080; Bamboo, \$1,193; Mangie bark, \$15,731; Orchilla, \$952; Pitch, \$172; Pumice stone, \$226; Rubber, \$14,192; Soap, \$1,326; Starch, \$1,999; Tamarinds, \$10; Tannin extract, \$4,871; Toasted coffee, \$183; Tobacco, leaf, \$80,732; Wool, \$477,355; All other articles, \$14,141; Total, \$15,102,501.

The export trade was distributed in 1918 as follows:

Chile, \$994,324; Colombia, \$60,926; Costa Rica, \$3,972; Honduras, \$295; Italy, \$11,057; Mexico, \$34,298; Panama, \$27,803; Peru, \$269,648; Salvador, \$10,599; Spain, \$362,573; United Kingdom, \$1,132,617; United States, \$12,194,389; Total, \$15,102,501.

Of the total amount exported, the United States received 78 per cent.; United Kingdom, 5.8 per cent., and Chile, 7.8 per cent.; Spain and Peru following with considerably less.

The exportations of cacao through Quayaquil for May, 1919 amounted to a total of 40,424 sacks, weighing 3,301,822 kilos, of which 1,877,950 kilos were sent to France, 751,874 to Great Britain, and 672,088 to the United States. Adding this amount to the amount exported from the 1st of September, 1918, to the 30th of April of the year 1919, the result shows that in 8 months shipments dispatched for foreign markets from the port of Guayaquil were 38,389,286 kilos, of which 21,878,387 were handled by the Agriculturalists Association and 16,510,899 by individual exporters.

During the month of May 1919, 10,529 cow hides were exported through the port of Guayaquil, showing a great increase over the previous month, when only 7,172 hides were exported.

TRADE WITH THE UNITED STATES.

The exports from Ecuador to the United States in 1918 were as follows:

Chemicals, drugs, dyes and medicines, \$87,938; Cacao, crude, \$7,975,868; Coffee, \$8,439; Copper, and manufactures of: Old and clippings for remanufacture, \$45; Cotton, unmanufactured, \$65,918.

Fibers, vegetable, and textile grasses, and manufactures of not elsewhere specified, \$2,394; Fruits and nuts: Olives, \$15,598.
 Hats, bonnets, and hoods, and materials for, \$448,754; Hides and skins (except fur skins), raw or uncured, \$630,098.
 India rubber, etc., \$258,016; Iron and steel, and manufactures of, \$7,976; Ivory: Vegetable (tagua nuts), \$642,691.
 Leather and tanned skins, \$67,515.
 Meat and dairy products: Cheese and substitutes for, \$34, 216.
 Sugar cane, \$239,035.
 Tungsten-bearing ore, \$12,559.
 Wool, hair of camel, goat, alpaca, and other like animals: Un-manufactured—Wool of the sheep, hair of the camel, and other like animals, \$364,599.

The American goods imported in Ecuador in 1918 were as follows:

Agricultural implements, \$43,814; Aluminum and manufactures, \$7,100; Animals, \$3,425; Abestos and manufactures, \$1,147.
 Blacking (including shoe paste, etc., \$4,00; Brass, and articles made from, \$10,572; Breadstuffs, \$187,514; Bronze, manufactures of, \$2,912; Brushes, \$2,564; Buttons, and parts of, \$8,380.
 Candles, \$5,360; Cars, carriages, other vehicles, and parts of, \$165,833; Celluloid and manufactures, \$2,967; Cement, hydraulic, \$47,344; Chemicals, drugs, dyes, and medicines, \$238,674; Chewing gum, \$3,816; Clocks and watches, and parts of, \$2,908; Coal and coke, \$48,578; Confectionery, \$9,437; Copper and manufactures, \$7,088; Cork and manufactures of, \$3,016; Cotton and manufactures, \$866,205.
 Dental goods, \$1,328.
 Earthen, stone and china ware, \$20,825; Electrical machinery, appliances, and instruments, \$168,896.
 Fibers, vegetable, manufactures of, \$24,809; Fish, \$51,322; Fruits, and nuts, \$9,062; Furniture metal, \$13,590; Furs and fur skins, dressed, and manufactures of, \$448.
 Glass and glassware, \$43,923; Grease, lubricating, \$5,088.
 Hats and materials for, \$4,815; Hops, \$7,199; Household and personal effects, \$2,649.
 India rubber and manufactures, \$83,875; Ink, \$10,743; Instruments and apparatus for scientific purposes, \$3,625; Iron and steel and manufactures, \$860,225.
 Lead and manufactures, \$12,910; Leather and manufactures, \$177,885.
 Malt, \$24,750; Meat and dairy products, \$624,290; Musical instruments, \$66,939.
 Naval stores, \$17,647; Nickel, manufactures of, \$31; Notions, not otherwise classified, \$4,294.
 Oilcloth and linoleum, \$7,676; Oil and manufactures, \$219,902.
 Paper and manufactures, \$191,186; Paraffin and paraffin wax, \$42,316; Pencils (except slate) and pencil leads, \$6,718; Perfumeries, cosmetics, etc., \$20,426; Phonographs, graphophones, etc., and records, and materials for, \$3,274; Phonographic goods, \$7,347; Plated ware (except cutlery and jewelry), \$14,596.
 Seeds, \$5,841; Shoe findings, \$11,063; Silk, manufactures of, \$12,725; Soap, \$127,580; Spices, \$3,270; Spirits, wines, malt liquors, and other beverages, \$51,549; Stone, and manufactures of, \$9,074; Straw and palm leaf, manufactures of, \$2,121; Surgical appliances (not including instruments), \$15,028; Suspenders and garters, \$5,181.
 Toys, \$7,615; Trunks, valises, and traveling bags, \$708.
 Vegetables, \$5,707.
 Wood, and manufactures, \$25,249; Wool and manuf., \$54,869.
 Zinc, manufactures of, \$7,859.
 All other articles, \$51,671.

A Presidential decree of the 30th of January 1919, authorized the exportation of peanuts through the warehouses of the Republic upon the payment of 5 per cent. ad valorem, fixed according to the price of the product in the market from which is shipped.

The Governor of Guayaquil has requested the consuls or

Ecuador in Panama and New Orleans to permit the depositing of goods shipped to Ecuador in Panama upon orders, that they may be taken to Guayaquil by boats of any company.

The Chamber of Commerce of Guayaquil and New York have signed a commercial arbitration agreement, and the Bank of Ecuador is said to be about to restore exchange rates. These two developments will greatly aid in bringing this Republic into closer commercial connection with the United States.

The President of the Republic issued a decree governing the rules and regulations of the tobacco law and repealing the decree of November 24, 1917, on the same subject. An export tax of 5 centavos per kilo, gross weight, is imposed on leaf and fine cut tobacco shipped abroad.

On October 28 last the internal tariff or transit law, was promulgated. Under this law sales, transactions, etc., made in the country are taxed.

Custom tariff beginning with January 1, 1919, the Custom Houses and Post Offices throughout the Republic shall collect one-fourth centavo per kilo, gross weight, or \$0.055 per 100 pounds, on exports and imports. The proceeds of this tax it used for the construction of educational buildings and for the maintenance of the Guayaquil Fire Department.

CUSTOM REGULATIONS.

The following information will be of value to shippers doing business with Ecuador:

Consular invoices, as well as manifests, must be made out in 6 copies. The Consul returns one signed copy to the shipper. A separate invoice is required for each mark. Shipments may be consigned direct or to order. Packages should show gross and net weight in kilos. Consular invoices must be made out in Spanish and contain the names of the shipper, the consignee, the steamer and her captain and flag; port of destination, total value of merchandise covered by the invoice; marks, numbers, kinds and number of packages, etc., gross and legal weight in kilos (legal weight includes inner container or wrapping) of each package or of a number of packages, specifying the kind of merchandise, according to the custom tariff. The fee for certification of consular invoices up to \$50 in value is \$1, for invoices of more than \$50, 3 per cent. of the declared value. Consular blanks cost 50 cents per set of 6. The steamship companies make the following additional charges: For invoices not exceeding \$50 in value, \$0.50; for invoices more than \$50 in value, 1.2 per cent. of the invoice value.

There are consuls in the following cities: New York, N. Y.; New Orleans, La.; San Francisco, Cal.; Philadelphia, Pa.

The ports of Guayaquil, Manta, Bahia de Caraquez, Esmeraldas and Puerto Bolivar are first-class ports according to the new customs law which went into effect November 1, 1917, and are authorized to transact all kinds of export and import trade as well as the transfer and reshipment of cargoes; the ports of Ballenita, Manglar, Alto, Cayo and Machalilla second-class maritime ports, to be used only in the exportation of com-

modities, and the ports of Tulcan in the Province of Carchi, Chacras in the Province of El Oro, and Macara in the Province of Loja, frontier ports for carrying on the export and import trade with neighboring countries. The Custom Houses are divided into maritime and land Custom Houses by the same law which also prescribes that they be open for business on working days from 7 to 11 A. M. and from 1 to 5 P. M.

SHIPPING.

The tonnage of steamers entering and clearing Ecuadorean ports in 1918 was 377,495, as compared with 492,553 in 1917, showing a considerable decrease.

The number of nationality of the steamers entering Guayaquil in said year were as follows: Chilean, 1; Danish, 1; Ecuadorean, 25; Japanese, 2; Norwegian, 2; Peruvian, 36; British, 84; American, 9. Total, 160.

Steamers and sailing vessels entered with 40,234 tons of imports and cleared with 40,531 tons of exports. The imports of the previous years aggregated 62,321 tons, the exports 45,792 tons, which was nearly 36 per cent. more imports and nearly 11.5 per cent. more exports than were shipped in 1918. The considerable decrease in steamer tonnage in 1917 over that of the previous year continued during 1918, and showed a difference of 26 per cent.

A new steamship line is to ply between New Orleans and the west coast of South America, with Guayaquil as one of the ports of call. Vessels of the Pacific Steam Navigation Co. again include Guayaquil in their itinerary, and the Peruvian Line is sending its steamers here on each voyage both north and south.

A proposal was made to the Ecuadorean Government by an English company to organize a company called the Marina Mercante Ecuatoriana to be registered in Ecuador and to navigate its ships under the flag of Ecuador along the coasts and in the Ecuadorean rivers. The company is to be devoted solely to Ecuadorean commerce and business. The Government of Ecuador, it is proposed, will issue 20-year bonds to pay for the service and the company will annually pay a suitable sum to provide for interest and amortization. The Government of Ecuador is to have one-fourth of the company's profits. The proposal was to be submitted to Congress October 11, 1919.

W. R. Grace & Co., have established a direct line of steamers between New Orleans and the ports of Ecuador, Peru, and Chile.

FINANCE.

The government suffered financially to a great extent during the war on account of reduced foreign trade, which resulted in reduced revenues. The revenues and expenditures during the three years previous to the signing of the armistice were:

Years	Revenue	Expenditure
1915	10,498,225	10,380,225
1916	9,124,325	8,882,480
1917	9,414,330	8,972,480

The fiscal revenues for 1918 amounted to 14,015,015 sucres, including the balances on hand in the treasury and consulates of the Republic at the beginning of the year, plus the profits derived from the mintage of nickel coin authorized by Congress. The fiscal expenditures during the same year were 15,887,718 sucres, causing a deficit of 1,872,173 sucres. The fiscal revenues were made up as follows: Import duties, 3,868,490 sucres; export and additional duties, 3,401,245; internal taxes, 6,490,125; and sundry receipts, 255,585 sucres, or a total of 14,015,445 sucres.

In 1918 the gross revenues from salt amounted to 1,157,020 sucres, and the net revenues to 700,714, or a gain of 201,784 sucres over the returns of 1917.

The revised revenue for 1919, in Ecuadorean money was, Import Duties, 6,089,307; Export Duties, 3,506,317; Inland Taxes and other Revenues, 7,264,180. Total, 16,859,804.

The revised expenditure for the same year was: Legislature and Executive Powers, 227,410; Ministry of Interior, Public Works, etc., Salaries, Pensions, etc., 340,324; Police, 1,200,000; Railways in Construction, 804,000; Local Public Works, 60,000; Sanitation, 1,027,200; Government Audit Office, 19,800; Embellishment of Guayaquil, 40,000; Ministry of Foreign Affairs, 1,009,570; Ministry of Public Instruction, 2,568,570; Ministry of War and the Navy, 3,907,875; Ministry of Finance, Public Credit, Salaries of Minister and Staff, 101,280; Public Debt, 3,765,000; Government Treasury Offices, Customs, etc., 1,731,492; Sundries, 57,093. Total, 16,859,804.

In 1918 payments were made on the public debt as follows: To sundry creditors, 1,525,500 sucres; and interest and sinking fund for account of the Guayaquil to Quito Railway, remitted to London from December, 1918, to July of the present year, £120,500, or 1,205,000 sucres.

The text of the law making effective the salt monopoly established in Ecuador by the legislative decrees of October 13, 1916, and September 26, 1918, was published recently.

This law provides that sea salt shall be handled exclusively by the government and that owners of salt mines may sell only to the Government. It fixes the price which the Government will pay and for which it will sell salt in the Republic. The law also limits the amount of salt that will be sold to any one person.

With regard to foreign salt, its importation is prohibited, "except in case it should appear for any reason to be impossible to supply the Republic with salt from the national mines. This proscription does not apply to refined salt, unless the Government should establish refineries for that purpose."

DEBT.

The foreign debt of Ecuador in January 1, 1919, totaled \$17,216,896, distributed as follows:

Bonds of the Guayaquil and Quito Railway Company, guaranteed by the Government of Ecuador:

Six per cent. Prior Lien Mortgage Bonds, \$1,953,000. Interest in arrear: Coupons of January, 1917, to January, 1919, \$292,950.

Five per cent. First Mortgage Bonds, \$10,732,000. Interest in arrear: Coupons of January, 1913, to January, 1919, \$3,487,900.

Four per cent. Salt Bonds, \$636,480. Interest in arrear: Coupons of January, 1915 to January, 1919, \$114,566.

From August, 1914, to July, 1918, no payments were made by the Government of Ecuador on account of any of its foreign obligations, but in August, 1918, daily deposits of 1,000 sucres were commenced, which were increased to 3,000 sucres in January, 1919, and 80,000 was remitted by the middle of February. The Coupon due July, 1915, on the outstanding Prior Lien Bonds, was paid out of funds remitted, prior to August, 1914, for the general service of the Railway Bonds, and the money for the payment of the Coupons due January and July, 1916, on the same Bonds was provided by the Railway Company, the Sinking Fund being in default since January, 1915.

Since August, 1918, the Ecuadorian Government has remitted to London about \$450,000 to apply on the debt past due owing to the bondholders of the Guayaquil & Quito Railway. That sum is sufficient to pay all arrears of interest and 26 per cent. of the sinking fund on the prior lien bonds.

In July, 1919, the city government of Guayaquil contracted a loan of 200,000 sucres from the Banco Agricola to build a municipal market.

By the terms of a contract signed by the directors of the Quito-Esmeraldas Railroad with the Banco del Pichincha of Quito, the railroad promised to deposit all the funds appropriated for this work by the legislative decrees in the bank; the bank, in return is bound to make a loan of 200,000 sucres, for which the aforesaid funds shall be security until its cancellation.

The President of the Republic has negotiated a loan of 500,000 sucres with the Commercial & Agricultural Bank of Quito, the proceeds of which are to be used for account of the Sibambe to Cuenca Railway.

A bill was introduced in Congress on October 20, 1919, authorizing the executive to contract for a loan in the exterior of \$5,000,000 at interest per annum not exceeding 6 per cent. 1 per cent. for amortization, and a discount not exceeding 15 per cent. for placing the loan. The proceeds are to be used in the construction of railroads, sanitation, and canalization of Guayaquil, service of interest and amortization of amount due holders of bonds of the Guayaquil and Quito Railway, and one-half due to the national banks.

A commission of English bankers visited Ecuador recently in order to negotiate a loan of 100,000,000 sucres to be used in the amortization of all bonds of the Guayaquil-Quito Railway, in the payment of the respective coupons, and in the payment of the internal debt, the remainder to be applied to the railroad lines under construction in the Republic at present.

BANKING.

The principal banks are:

Banco Comercial y Agrícola, Guayaquil, Ecuador, S. A. Capital, 5,000,000 sucres; Reserve fund, 3,200,000 sucres; Undivided profit, 536,006.10 sucres. It is a bank of issue.

Banco Territorial, Guayaquil, Ecuador, S. A. Capital, paid up, \$700,000; Reserve, \$654,000; Undivided profit, \$135,000.

Banco de Crédito Hipotecario, Guayaquil, Ecuador, S. A. Established in 1871. Capital, 1,000,000 sucres; Reserve, 378,950.00 sucres.

Banco del Ecuador, Guayaquil. Established in 1868. Capital, authorized and issued, 3,000,000 sucres. Bank of issue.

Banco del Pinchincha. Head office, Quito. Capital, 1,000,000 sucres. Bank of issue.

The state of the banks of issue on Jan. 1, 1919, may be known by the following data: Banco del Azuay: Capital, \$243,427; circulation, \$252,259; deposits, \$130,818. Banco del Pinchincha: Capital, \$778,968; circulation, \$1,490,889; deposits, \$777,103; Government debt, \$605,332. Banco del Ecuador, Capital, \$1,460,565; circulation, \$697,222; deposits, \$2,325,316; Government debt, \$1,954,822. Banco Comercial y Agrícola: Capital, \$2,434,270; circulation, \$3,511,042; deposits, \$3,254,452; Government debt, \$4,063,873.

The Loan & Construction Co., of Ecuador, increased its capital in July last by 200,000 sucres, making its total capitalization 400,000 sucres.

A Bank is to be established at Latacunga from the proceeds of the sale of real property owned by the Vicente Leon College, that institution taking 50 per cent. of the stock, the remainder to be subscribed by the public. The sale of the property is not to be made until the public subscribes the 50 per cent. referred to. The bank will have mortgage issue, and discount sections.

The loan section of the Quitena Agricultural and Industrial Co. (Compañía Quitena de Crédito Agrícola e Industrial) has been very active in the past year. The balance drawn up January 1, 1919, shows that 3,296,967 pesos/silver were lent during the year, for which mortgage bonds (cédulas) to the value of 3,049,575 were issued. In 1917 loans of 2,993,907 were made, with 2,655,975 pesos in mortgage bonds issued.

The banking establishment "Banco Suramericano," recently founded in Quito, was authorized to start on May 8, 1919.

The Agricultural Association of Guayaquil signed a contract with the Mercantile Bank of the Americas appointing this banking house as its general agent for the sale of cacao throughout the world. The bank promised through its New York office, its branches, and affiliated firms throughout the world, to bring this Equadorean product before buyers and to increase the sale. All the expenses of loading, transportation, storage, brokerage, and the sale of cacao, including maritime insurance, war risk and fire insurance, handling, weighing, etc., will be charged to the account of the association. It will send annually to the bank an unstated quantity of cacao to be sold at the risk of the association, but it will have the right to ship to the most convenient markets. The bank will receive a commission of 1½ per cent. on sales effected by the bank or its branches, and 1 per cent. commission on sales effected by the association. According to a clause of the contract, the bank will open a current account in favor of the association for \$2,000,000 gold on which it can draw at three days sight for operations in buying cacao.

The year 1918 witnessed remarkable fluctuations in the rate of bank exchange. During the first nine months the rate

was 2.43 sucres to the dollar, rising gradually to 3.2, and for a few days even to 3.3. Owing to this unnatural state of affairs, the Government in December, 1918, established an advisory council of financiers to the Minister of Finance, who was empowered to fix the bank rate of exchange on all exterior centers, which he promptly placed at 2.43 sucres to the dollar; but the rate dropped to 2.11 before the end of the month, some exporters selling one or two points below. The true cause of the decline was the heavy movement of cacao, during November and December, aggregating 10,500 tons valued at \$2,800,000.

On account of differences of opinion between the Minister of Finance and the consulting finance board, the banks suspended the sale of drafts on the exterior during May, 1919, the result being that the rate of exchange advanced from 213 to 220 per cent, and drafts could be bought only from merchants.

By decree of October 26, 1919, Ecuador fixed the official rates of exchange upon foreign countries at: New York and San Francisco, 243 per cent.; Panama, 244 per cent.; London, 231 per cent.; Paris, 222 per cent.; Spain, 260 per cent.; Switzerland, 248 per cent.; Italy, 191 per cent.; Peru, 12.50 sucres per pound, Peruvian; Chile, 34 per cent. discount.

Banking Holidays.

January 1, New Year's Day; January 6, Epiphany; February 14, National Holiday; April 1, Holy Thursday; April 2, Good Friday; April 3, Holy Saturday; May 24, National Holiday (Battle of Pichincha); May 29, Ascension Day; June 3, Corpus Christi; August 10, National Holiday (Independence of Quito); August 15, Assumption; September 18, National Holiday (Separation from Chile); October 9, National Holiday (Independence of Guayaquil); October 12, Discovery of America; November 2, All Soul's Day; December 8, Immaculate Conception; December 25, Christmas Day. As October 12 falls on Sunday, the following Monday may be observed.

MONEY.

The unit of value in the currency of Ecuador is the sucre of 100 centavos—\$0.487. Ten sucres make a condor which is equivalent, in normal times, to a pound sterling. The Republic adopted the gold standard in 1898, and has coined a 10-sucre piece. The coins current are of silver, a sucre, a peseta (20 centavos), a real (10 centavos), and medio real (5 centavos). There are also coins of nickel, of 5, 2 and $\frac{1}{2}$ centavos respectively.

On January 1, 1919, there were 27,248,980 sucres in circulation in the country, in the following denominations: Gold, 5,381,288 sucres; silver, 3,244,475; and bills, 18,623,217 sucres. Of the latter, 8,211,000 sucres were issued by the Bank of Ecuador, 7,105,551 by the Agricultural Bank, 3,062,279 by the Bank of Pichincha, 518,140 by the Bank of Azuay, a total of 18,896,970; but of this amount 273,753 remained in the coffers of the banks, leaving in circulation the amount stated.

The rate of exchange on drafts of the United States, which was fixed by the President at 205 per 100, has been modified by the Government to 215 per 100.

RAILROADS.

The total mileage of the railways in Quito is about 400 miles. The following are the most important lines:

Central Railway of Ecuador, Ltd. Registered in London in 1910. Capital, \$500,000. Mileage, 38.

Guayaquil and Quito Railway Co. Incorporated in New Jersey in 1897. Capital, \$12,283,000. Mileage, 290.

According to the latest message of the President the work of building the Quito to Esmeraldas Railway has been divided into two parts,—namely, survey and construction. The survey of the line between Pailon and the city of Ibarra, is nearly completed. The length of the line between Quito and Ibarra is 167 kilometers, on 84 of which work has been done. The total cost of construction is estimated at 23,431,000 sucres made up as follows: Quito to Ibarra, 8,029,000 sucres; Ibarra to San Lorenzo, including interior port works, 14,602,400; and exterior port works, etc., 800,000 sucres. During the fiscal year 1918-19 the amount expended on this enterprise was 249,477 sucres, and the total sum disbursed to date, 1,077,308 sucres.

The Sibambe to Cuenca Railway has been surveyed between Santa Rosa and San Antonio. During the first half of 1919, 190,000 sucres were spent in this work, and 300,000 sucres were available for expenditures during the second half of this year.

The main line of the Railway from Guayaquil to the Coast has been built to kilometer 75, and the Playas branch has been completed. These two sections have a total of 101 kilometers. There are still 75 kilometers to be constructed before Salinas, the terminal point, is reached.

In July, 1919, the Guayaquil-Quito Railroad Co. reestablished the fortnightly passenger train service between the two cities.

In 1918 the Railways of Ecuador disbursed the following amounts: Ambato to Curaray, 147,558 sucres; Sibambe to Cuenca, 146,708 sucres; Quito to Esmeraldas, 249,477 sucres; Guayaquil to the coast, 3,000 sucres; Bahia to Quito, 9,334 sucres; and Guayaquil to Quito, for the correction of the San Juan Chico to Riobamba section, 24,200 sucres, or a total of 580,277 sucres.

The telegraph system consists of about 5,400 miles of lines, with 204 offices. Nearly half a million messages are handled annually.

Two wireless stations are operated in Guayaquil.

The Government has contracted with the Sociedad Francesa Radio Eléctrica of Paris for the installation of three wireless telegraph stations.

PUBLIC UTILITIES.

Public-utility development in Ecuador has been relatively unimportant. In Quito there is an electric tramway line, installed by J. G. White & Co. This, together with the Quito Electric

Lighting & Power Co., which furnishes light and power to the city, is owned by the Ecuadorian Corporation, a British company, incorporated in 1913 with a capital of (500,000 shares, partially issued and 500,000 authorized 6 per cent. first debentures, also partially issued). The Ecuadorian Corporation also owns water power rights near Quito, the Inca Springs Co., and interest in the Banco del Pichincha at Quito, lands at Quito and Duran, etc. This company met with temporary financial difficulties during the early days of the European war owing to adverse exchange conditions, but its position has since improved and all subsequent coupons have been duly paid at maturity.

There are two street-car lines in Guayaquil, as well as electric lighting and gas plants. The water supply of the city is brought through mains from a point in the mountains some 53 miles away. There are one or two mule tramway lines in the interior, small electric lighting plants have been established in a few of the cities, and there are some opportunities for the extension of this service. Water service is far below the needs of the people, and sewerage systems are needed in almost every city.

There are about 3,000 telephone instruments installed in Ecuador, mostly in Guayaquil, the leading company in the field being the National Telephone Co., capitalized at \$125,000. The total capital invested in the telephone systems of the Republic is said to be \$181,687.

On November 14, 1917, the exchange of ratifications of the parcel-post convention, concluded on January 28 of that year between Ecuador and Panama, was made.

PUBLIC WORKS.

The concession for the construction and conservation of the mountain road from Punto de Portavelo to Santa Rosa, granted to the American Development Co., has been extended for an additional period of six years.

Late in March a campaign for the sanitation of the city of Duran was aggressively begun under the direction of Dr. Connor, of the Rockefeller Institute in the United States. The principal object is the suppression of yellow fever.

The cost of the Sanitation of Guayaquil from January 1, 1914, to December 31, 1918, was 3,298,570 sucres of which 472,279 sucres were paid to the contractors in 1918.

The total expended in public works during the fiscal year 1918-19 aggregated 1,238,143 sucres.

PRINCIPAL DEALERS.

The following is a partial list of merchants and dealers of imported goods in Guayaquil:

Custom House Brokers.

Lorenzo Alberton, Malecón, 508; Bejarano y Alvarado, Malecón, 507; Gijon Caamaño y Co., Malecón, 1000; M. Campodónico, Pinchíncha, 528; L. Guzman e hijos, Junín, 106; W. Higgins, Orellana; López y Guzman, Malecón, 902 a 904; Carlos M. de Murieta, Pichincha, 218; Hnos. Reyre, Malecón, 403; Ricker y Co., Illingworth, 105;

Rohde y Co., Malecón, 1003; E. Stagg, Malecón, 908; Icaza y Zevallos, Malecón, 607.

Shoes.

Antonio Bague, Calle 11, 119; Luis Bruzzo, Av. 1ra., 1605; Evangelista Calero, Av. 3a., 708; Calveras y Co., Av. 2a. 323; Luis F. Zacarias Daniello, Av., 1ra. 1504; Rizzo y Di Puglia, Av. 2a., 405; Juan Dumani, Av., 1ra. 1502; Miguel A. Dumani, Av. 2a. 417; Fabrica Nacional de Calzado, Av. 3a. 1306; Freres Farah, Av. 2a. 410; Fayad y Co., Av. 1ra. 1,507; A. y L. Garcia, Av. 2a. 613; Rubio Gonzalez y Co., 2a. Av. 319; Rubio Gonzalez y Co., 2a. Av. 319; F. Hanna y Yashak, Av. 1a. 1506; Nos. Hannaoni, Av. 2a. 320; Miguel G. Hurtado, Av. 1ra. 1603; Pow King, Av. 2a. 423; Leon King y Co., Av. 2a. 401; Antonio Maisto, Av. 1ra. 1401; Juan Molinari, Av. 1ra. 1501; Hnos. Macho, Av. 1ra. 1606; Juan F. Rivas, Av. 3a. 620; Manuel A. Salazar, Calle 12; Sanchez y Co., 3a. 622; Antonio Vieens, Av. 2a. 211; José Ziadé, Av. 2a. 601.

Druggist.

Aleman y Co., Av. 1ra. 1306; R. T. Angulo, Av. 2a. 425; Begnino Astudillo, Calle 9, 226; C. Lopez Lescano, Pichincha 206; M. B. Miranda y Co., Av. 3a. 300; Luis M. Montes, 9 de Octubre 112.

Hardware.

F. A. Cevallos, Sucre 221; Manuel Defranc, calle 11a. 114; Descalzu y Co., Malecon 1109; Andrés Dunn, calle 11a. 107; Durán y Co., Av. 1ra. 1130; E. N. Figueroa, Pedro Carbó; Mulricio Garrier, Av. 1ra. 1204; Gonzalez Rubio y co., Av. 2a. 319; Carlos L. Herrog, Av. 2a. 314 y 316; R. B. Jones, Ave. 2a. 329; Guillermo Kaiser, Av. 2a. 118; Miranda y Martinez, Av. 1a. 1202; Suc. de Fortunato Mortola, Pedro Carbó 720; Muller y Co., Av. 1ra. 1403; A. R. Parra, Pedro Carbó 303; Enrique Rivas, Av. 1ra. 1400; Martin Riera, Av. 3a. 812; Alfonso Roggiro, Av. 2a. 123; Sola y Co., Av. 2a. 1209; Lucas Tramontana, Pichincha y Sucre; S. B. Viggiani, Malecon 2100; Bartolomé Vignolo, Av. 2a. 313.

Dry Goods.

José Aguirre y Hnos., Av., 2a. 505; Salomon Albagli, calle 2a. 109; Jacobo M. Attias, Av. 1a. 1504; J. Ellodoro Aviles, calle 9a. 115; Antonio Begué, calle 11a. 119; Carlos A. Borja, calle 9a., 203; Luis Bruzzo, Av. 1ra. 1605; Calveras y Co., 2a. Av. 323; Antonio Casas, Av. 3a. 700; Antonio Dávila Zabala, calle 9a. 221; Juan Dumani, Av. 1ra. 1505; Luis S. Garcia, Av. 14a. 213; Jorge Huesped, calle 13a. 127; José Iza, calle 12a. 119; Juan Lombelda, calle 13a. 217; Antonio Maisto, Avenida 1ra. 1401; José Maldonado y Co., calle 12a. 209; Damian Miranda, Av. 2a. 322; Hnos. Nacho, Av. 1ra. 1606; José Palacios Torres, Av. 2a. 306; Adolfo Poppe, Av. 2a. 306; A. M. Roiz, Av. 2a. 425; José D. Salcedo, Av. 2a. 519; Emilio M. Silva, Av. 2a. 212; R. Tapia y Co., Av. 3a. 504; José Ziadé, Av. 2a. 601.

Jewelry.

Felipe R. Aguirre, calle 11a. 104; José Allieri, Malecon 1609; Antonio Arce, calle 9a. 108; J. S. Arce, Sucre 205; J. P. Bedoya, Pl. de S. Francisco; S. Agustin Calero, calle 14a. 600; L. Cavanna, calle 12a. 106; Augusto Faggiani, Av. 2a. 216; M. Flores, Villamil 109; Guzman y Co., Municipalidad 213; J. M. Hernandez, 9 de Octubre 225; Hernandez y Co., calle 11a. 126; Carlos L. Herzog, Pichincha 314; José A. Jimenez, calle 13a. 215; Carlos Marmol y Co., calle 10a. 19; L. Miguel Marquez, calle 15a. 113; B. Muñoz, Villamil 121; Elias Paez, calle 3a. 513; Manuel A. Pereira; Carlos S. Phillips, Pichincha 409; J. M. Samaniego, Clemente Bellen 615; Esteban Vinelli, calle 9a. 220; Manuel B. Zufiga, Av. 2a. 510.

Furniture.

J. Camaño, Industria 1300; Veloz y Chavez, Pedro Carbó 421; C. A. Freire, Agurre 216; C. Palomeáue, Industria 606.

Stationery.

Luis Contreras; Encalada y Co.; Anotonio Ferrand; Janer e hijo, Pichincha 415; Jacinto A. Jouvin; Santiago Martinez G.; Moles-tina y Maruri; Suc. de Marin Quintana; Hnos. Santos; Uzcategui y Co.

Hats.

Pedro Anchundia calle 15, 314; Manuel Calveras y Co., Av. 2a. 325; Rubio Gonzalez y Co.; Luis F. Guerrero, calle 11a. 209; Manuel Jaramillo, Av. 2a. 233; A. Moises Lopez, Av. 2a. 200; Medina y Co.; Luis F. Mera, calle 15a. 304; Manuel Moscoso, Av. 2a. 305; Andrés Murillo, Av. 3a. 405; José A. Noblecilla; Eliseo Palacios, Ave. 2a. 1012; José Torres Palacios; Cesarlo Palis, calle 13a. 735; Juan Elías Pérez; Francisco Pesantes; Adolfo Poppe, Av. 2a. 306; L. E. Rios, Av. 2a. 404; Gabriel Ruiz, Av. 2a. 118 Ramón Saba; Vda. de Tonesi, Av. 2a. 517; Gregorio Valverde, calle 6a. 304; Isaac Vargas; Rosario Villacrés, Av. 2a. 134; Inocencio Villalva, Av. 2a. 706; Domingo Zevallos, Av. 2a. 308.

The following are among the principal dealers of imported goods in Quito:

Druggists.

Antonio Aleman, Mortensen; Alejandro Altuna; Teodomiro Andrade; Pablo S. Baca; José M. Batalla; Teodoro Calderon; Manuel Calixto; Francisco U. Cartagenova; Pl. del Teatro Central; Fernando Ceballos; Del Comercio, Venezuela 60.

Jewelry.

F. Ceballos y Co., de Bolivar; S. Rafael Cisneros; Juan Cornejo; Rafael Echeverría; Llorenco Gonzalez; Emilio Guerrero; Emiliano Hinojosa; La Internacional y Co., Chile 24; G. Lopez N. y Co., de Venezuela, 62; L. F. Mino, Co., de Garcia Moreno 63.

Book-sellers.

Hnos. Acosta, Garcia Moreno, Concepción 46; Roberto Cruz, Portal Arzobispal, letras J. y K.; El Comercio, Carr. Chile; Luis Guerra L. y Co., Escribanias; A. Lucio Paredes, Co. de Garcia Moreno 52; N. Montedeoca, Pl. de la Independencia; C. Mosquera, Chile; Bonifacio Muñoz; José María Ortiz, Apartado 99; El Tiempo, Venezuela 77.

Tailoring.

José F. Aguirre; Nicanor Arauz; Manuel M. Ayala; Ramón Baca; Nicolás Bayas; Federico F. Bedoya; Jose Carrera.

Hats.

N. Cruz; Alberto Dobron-ki; Alejandro Eguez; B. Alfonso Narvaez; Victoriano Orejuela; Juan J. Toledo.

Dry Goods.

N. Acevedo, Co. de Garcia Moreno 57; L. F. Andrade, Co. de Sucre y C. de la Campaña; L. Baca y Hnos., Co. de Garcia Moreno y Sucre; R. Barba N., Co. de Garcia Moreno 51; J. Barriga, Co. de Venezuela 70; A. M. Beltran, Co. de Garcia Moreno 61; J. B. Cabezas, Co. de Venezuela; L. A. Caballos, Co. de Venezuela 65; A. Ferri, Co. de Guayaquil y Bolivia; J. F. Game, Cia. de Guayaquil Bolivia.

Shoes.

Carlos Aguirre; Lorenzo Alban; Antonio Balarezo; Ricardo B. Recerra; Alejandro Benalcazar; Daniel Cadena; Domingo Cañas; Belisario Cerrillo; Rafael Flores; Rosendo Guerrero.

GUATEMALA.

The estimated area of Guatemala is 48,290 square miles, and the population was 2,003,579 inhabitants on December 31, 1914. About sixty per cent. of inhabitants are pure Indians, and most of the remainder are half-caste.

Guatemala City is the capital of Guatemala and has a population of 90,000 inhabitants, five-sixths of whom are of European origin. Quezaltenango has a population of 28,940; Cuban, 30,770; and Totonicapan, 28,310.

Guatemala City was partially destroyed by earthquakes in 1917.

GOVERNMENT.

Guatemala has a republican constitution.

Manuel Estrada Cabrera, who had been dictator of Guatemala for 22 years, by succeeding himself at the end of each presidential term, was deposed by the newly elected national Assembly in March, 1920, and after resisting for few days surrendered and abdicated.

Carlos Herrera, a wealthy coffee planter, was elected provisional president, and he formed his cabinet as follows:

A. A. Saravia, Secretary of Justice

Luis P. Aguirre, Secretary of Foreign Affairs.

M. Arroyo, Secretary of Public Instruction.

Alberto Mencos, Secretary of Public Works.

Adrian Vidaurre, Secretary of Treasury.

José A. Beteta, Secretary of War and Navy.

A law of the legislative assembly of March 18, 1919 fixed December 15 for the election of deputies to the legislative assembly of the Republic which is opened March 1, 1920.

The new government which is backed by the majority of the people, has expressed its decision to conduct public affairs democratically and at the same time in a strictly business-like way. The new President has announced his decision to undertake the reorganization of the country, which had suffered very much under an absolute dictatorship.

AGRICULTURE.

The wealth in live stock is as follows:

Cattle, 556,383 head; horses, 63,704; mules, 32,924; sheep, 10,790; goats, 10,790; hogs, 188,390 head.

Approximately 100,000 cattle are marketed annually in Guatemala, and 20,000 of these would be available for export

under favorable conditions. These cattle average about 900 pounds in weight.

According to recent reports, there are 1,500 coffee plantations under cultivation in Guatemala, covering an area of 96,000,000 square yards. These plantations produce about 1,000,000 quintals of coffee and give employment to about 100,000 laborers annually.

An American firm, in combination with a banking company of Guatemala, is advancing large sums of money at 870 per annum to the coffee growers for the purchase of Guatemala coffee on a large scale. If, when the time comes, to liquidate this account, the planter should not accept the price offered by the company, he remains at liberty to sell to whomever may offer a better price, taking advantage of competition, by paying $2\frac{1}{2}$ per cent. more on the sum advanced to him. That is to say, the coffee growers pay $10\frac{1}{2}$ per cent. annually on such sums as have been advanced to them in case they decide not to sell their product to the company.

The area of cereals under cultivation in 1919 was distributed as follows: Corn, about 200,000 acres; beans, about 6,000 acres; wheat, 35,000 acres; rice, 5,800 acres; potatoes, 1,900 acres; yuca, 289 acres; manzanas, 500 acres.

The President has authorized the board of agriculture of the Department of Huehuetenango to collect annually 10 per cent. of the product of the communal crops of that district in order to secure sufficient seeds to be used in a new agricultural experiment station on public land at the capital of this department, for the purpose of cultivating hemp-producing fibers and preparing selected seeds.

MINING.

Gold is mined in Guatemala only in the form of placers, although it is reported that at the time of Spanish domination there were several gold mines in operation.

There is a large area in Guatemala, principally along the Motagua River, where gold is known to exist in small quantities, and two companies have been organized for the exploitation of this field.

A number of silver mines are said to have been worked many years ago. Formerly Guatemala mined and coined silver. The Departments of Huehuetenango and Chiquimula show indications of mining operations in former times. At present there are no silver mines in operation in Guatemala, although there are several localities which, it is said, could be advantageously exploited.

Lead deposits are numerous in Guatemala, principally in the northwestern part of the Republic. At present local demands for lead are being supplied by the Indians, who are working some of the deposits. There is also one small company mining lead, which employs a blast furnace.

This lead occurs in veins in the limestone, and also on the "lime serpentine contact." In general, the lead also carries low silver values.

Zinc is found principally in the Department of Chiquimula, where it occurs in replacements in the "altered" limestone and likewise in contact veins. It is generally associated with lead and some copper.

In other Departments there are evidences of the exploitation of ore bodies containing zinc, and it is probable that lead and silver likewise were mined there.

Traces of copper are found in various sections.

There are several deposits of good-grade iron in Guatemala, but at no place does it exist in bodies of sufficient importance to attract attention at present.

Limestone is found in great quantities. A siliceous volcanic ash is frequently found with the limestone which can be roasted with the lime for the manufacture of cement, resulting in a good-grade product.

Coal has been found in small quantities, but in no locality as yet has it been exploited on a considerable scale. Graphite has also been found in several places in Guatemala.

A good-grade of marble has been found in very large quantities for the exploitation of which a company was formed. This company commenced preparatory operations on a large scale and constructed a railway line to the quarry, but finally were forced to cease operations because of shipping conditions.

Niter-bearing ground is found in numerous regions in Guatemala, but the principal deposits are along the lower stretches of the Motagua Valley. The exploitation of the deposit on a commercial basis has not yet been attempted. The natives are working the deposits in their own manner, and the bulk of the niter consumed by the local market is obtained from this field.

Large amounts of sulphur are brought to the market by the Indians, who extract the sulphur from the numerous volcanic craters.

Titanium, mercury, antimony, and molybdenum are all known to exist in Guatemala.

Prospecting present unusual difficulties in Guatemala because of the thick vegetation in some places and the heavy capping of volcanic ash in other places, both of which hide the rock very effectively.

An exceptional pure chromite are containing 54 per cent. of chrome oxide was discovered recently in the Department of Progreso. About 600 tons of this ore were shipped to the United States by the Mine Loreta.

Other deposits of chromite have been found in the Department of Jalapa, which at present are being worked by the International Railways. They have been shipping, approximately, 500 tons a month to New York. This chromium field extends over an area 15 miles square. Mining is being done by hand labor, and only a hand-picked product exported. Zones of low-grade ore in the neighborhood, not being worked at present because of high cost, may prove a valuable asset in the future when machinery is installed.

A good-grade of mica has been located in the Department

of Quiche. Three or four tons have been shipped to the United States in an experimental way. The workings at present are all at the surface. The mica contains a very low percentage of iron and splits into large sheets.

The total number of mines that have been declared or registered is approximately 135. Of this total probably not more than half a dozen are worked. The mining laws of the Republic are extremely liberal, a concession being necessary only in the event that machinery is to be installed. A mining claim covers approximately 25 acres of surface and allows the holder to mine as far beneath the surface as desired.

During the year 1918 mineral exploitation was carried on extensively in the Republic, as 4,000 tons of iron and chromium were produced in the Departments of El Progreso and Jalapa; 60,000 cubic yards of earth were mined in the Las Quebradas gold mines, Department of Izabela; and in the Department of Huehuetenango 17 seams of lead were exploited profitably.

INDUSTRIES.

The annual production of white sugar in Guatemala is unofficially placed at 24,000,000 pounds and of brown sugar at 100,000,000 pounds. Of this, some 30,000,000 pounds of white sugar were exported in 1918, as well as approximately 3,000,000 pounds of brown sugar. The brown sugar, or *panela*, is consumed to a great extent in the manufacture of alcohol, and also sells heavily in the local retail market in the place of the white sugar.

Brown sugar estates are numerous throughout the Republic, whereas white sugar is produced almost exclusively in the Department of Escuintla, on the Pacific slope. In the order of their importance, by nationalities, the principal producers of white sugar last year were: Italian, 1,000,000 pounds; English, 3,800,000 pounds; American, 4,500,000 pounds; German, 9,800,000 pounds; Guatemala, 22,000,000 pounds. As indicated, German interest furnish about 25 per cent. of the crop. It is estimated that this year's crop will amount to only 35,000,000 pounds.

Although in 1918 exportation of sugar was prohibited except by special license from the President of the Republic; 75 per cent. of the total crop was sent to foreign markets. By far the greater part of this sugar went to Mexico, some to British Honduras, and the remainder to the Republic of Honduras.

Guatemala manufacturers annually about 100,000,000 cigarettes, worth approximately \$185,000 United States currency. The principal factories are in Guatemala City and Quezaltenango.

The cigarette-making machines used in manufacturing are largely German made, the most popular mark being the "Calverlas," of which there are five in use. Only two American machines are at present in use, although American cutters, dryers, and other auxiliary apparatus predominate.

The greater part of the tobacco used in the manufacture

of these cigarettes is produced in Honduras, although a small amount is raised in Guatemala. One company imports a small quantity of Virginia tobacco for mixture with native leaf.

Approximately 3,000,000 cigars are produced each year, with a value of \$75,000 United States currency. No machinery is used in the manufacturing.

FOREIGN TRADE.

The foreign commerce in 1918 was valued at \$19,785,021—an increase of \$2,919,990 over the year 1917.

The products exported from Guatemala to the United States in 1918 were as follows:

Coffee, \$6,052,551.
 Dyewoods, all other, \$35,347.
 Fibers, textile grasses, etc., \$33,216; Fruits, \$786,015.
 Hides and skins (except fur skins), raw or uncured, \$490,523;
 Honey, \$19,784.
 India rubber, crude, \$20,755.
 Leather: Belting and sole, \$9,485; Leather—All other, \$4,997;
 Lead, \$569.
 Minerals: Chromate of iron, \$29,563;
 Oils, distilled and essential, \$4,247.
 Photographic goods—Motion-picture films, \$25.
 Sugar-Cane, \$103,720.
 Wood, and manufactures of, \$34,485; Wool, unmanufactured, \$134,539.

The American products imported by Guatemala in 1918 were as follows:

Agricultural implements, \$30,517; Animals, \$2,624.
 Blacking, shoe paste, etc., \$4,886; Brass, and manufactures of, \$10,891; Breadstuffs, \$1,272,773; Brooms, \$2,090; Brushes, \$3,603;
 Buttons and parts of, \$3,546.
 Candles, \$4,806; Cars, automobiles, and other vehicles, \$114,629;
 Celluloid, and manufactures of, \$4,942; Cement, Hydraulic, 23,808;
 Chemicals, drugs, dyes, and medicines, \$146,428; Chewing gum, \$8,173; Coal and coke, \$3,739; Confectionery, \$11,140; Copper, \$10,217;
 Cork, and manufactures of, \$2,409; Cotton, \$1,155,853.
 Dental goods, \$1,604.
 Earthen, stone, and china ware, \$26,577; Electrical machinery, appliances, and instruments, \$47,741; Explosives, \$41,203.
 Fibers, vegetables, manufactures of, \$69,175; Fish, \$561,576;
 Fruits and nuts, \$21,822; Furniture of metal, \$6,390.
 Glass and glassware, \$35,225; Gold and silver, manufactures of (including jewelry), \$238; Grease, \$2,883.
 Hats and materials for, \$8,803; Hops, \$440.
 India rubber, manufactures of, \$25,231; Instruments and apparatus for scientific purposes, \$4,344; Iron and steel, \$1,077,185.
 Lamps, chandeliers, etc., (except electric), \$8,713; Lead, and manufactures of, \$3,377; Leather, \$131,961.
 Malt, \$25,172; Matches, 4,094; Meat and dairy products, \$113,252;
 Musical instruments, and parts of, \$6,836.
 Notions, \$7,601.
 Oilcloth and linoleum, \$3,680; Oils, \$169,801.
 Paints, pigments, colors, and varnishes, \$28,161; Paper, \$165,759;
 Paraffin and paraffin wax, \$38,822; Pencils (except slate) and pen and ball leads, \$2,622; Perfumeries, cosmetics, etc., \$13,197; Phonographs, graphophones, etc., and records, and materials for, \$16,838; Photographic goods, \$16,965; Plated ware (except cutlery and jewelry), \$4,967.
 Roofing felt and similar material, \$7,405.
 Seeds, \$3,829; Shoe findings, \$7,728; Silk, manufactures of, \$7,187; Soap, \$28,333; Spices, \$3,502; Spirits, wines, malt liquors, and other beverages, \$59,294.

Toys, \$4,335; Trunks, valises, and traveling bags, \$1,105.
 Umbrellas and parasols, \$8,791.
 Vegetables, \$40,280.
 Wood, 256,749; Wool, manufactures of, \$12,414.
 Zinc, and manufactures of, \$1,409.
 Banco de Guatemala, Guatemala. Established 1895. Directors: Adolfo Stahl, D.B. Hodgson, José R. Camacho, Carlos Gallusser. Authorized capital, \$10,000,000.00. Capital subscribed and paid-up, \$2,500,000.00. Correspondents in New York, New Orleans, San Francisco, Cal., Mexico, Paris, London, Barcelona, Milan, and Madrid.
 Banco Americano de Guatemala. Established 1895. Capital subscribed and paid-up, \$4,000,000.00. Correspondents in London, Paris, Madrid, Barcelona, Milan, Genoa, New York City, New Orleans, La., San Francisco, Cal., and Mexico. Agents and correspondents in all parts of Central America and in all cities of this Republic.
 Banco Agrícola Hipotecario, Guatemala. Established in 1894. Capital, \$5,000,000. Correspondents, \$1,388,888.
 Banco de Occidente. Established in 1881. Capital, \$1,650,000. Reserve fund, \$15,750,000.
 Banco Internacional de Guatemala. Established in 1877. Capital, \$2,000,000. Reserve fund, \$2,253,303.
 The dollar sign in each case represents Guatemalan dollar or peso.

A convention concerning commercial travelers was concluded in Washington on December 3, 1918, between the Government of the United States and Guatemala. The following are among the most important provisions of the treaty: "In case either of the High Contracting Parties shall be engaged in war, it reserves to itself the right to prevent from operating within its jurisdiction under the provisions of this treaty, or otherwise, enemy nationals or other aliens whose presence it may consider prejudicial to public order and national safety." "Peddlers and other salesmen who vend directly to the consumer, even though they have not an established business in the country in which they operate, shall not be considered as commercial travelers, but shall be subject to the license fees levied on business of the kind which they carry on.

On August 25, 1919, ratifications of the Commercial Travelers Convention between the United States and Guatemala, signed December 3, 1918, were exchanged.

CUSTOM REGULATIONS.

The following regulations about shipping are now in force: For shipments to Guatemala a set of five invoices, in Spanish, must be submitted to the Consul before the steamer or vessel leaves the port. The invoices must contain the names of shipper and consignee, place of origin, port of destination, name of vessel; marks, number, gross and net weights, contents, and character of each package; total value of the invoice; details of contents of each package, and also a sworn and signed declaration of the shipper as to the correctness of said value. Each package must be numbered. Different marks require separate invoices, even when shipped to the same consignee. Packages destined for different ports cannot be included on the same invoice. Importations of firearms, ammunition, and electrical goods require a special permit from the Guatemala Government. Bills of lading must accompany the consular invoice when presented for certification. Four

copies of the bill of lading are certified without charge.

Steamship companies require from three to five copies of the bill of lading. The charge for certifying invoices is 2 per cent. ad valorem; for the legalization of ship manifests, \$10; for the certification of sets of bills of lading (four copies) \$1, and \$1 for each additional copy; for legalizing health certificates, \$1; for certifying signatures of documents required by the Guatemalan government, \$3.

Guatemala has the following consulates in the United States: Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Galveston, Tex.; Jersey City, N. J.; Kansas City, Kans.; Louisville, Ky.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Pensacola, Fla.; Providence, R. I.; St. Louis, Mo.; San Francisco, Cal.; San Juan, P. R.

SHIPPING.

Puerto Barrios and Livingston are the principal ports in the Atlantic side and San Jose, Champirico and Ocos on the Pacific coast. They are visited regularly by steamers doing service along the Pacific coast from San Francisco to the Chilean coast, and by ships plying on the Caribbean sea.

A quarterly steamship service just established by the Pacific Mail Steamship Co., between San Francisco, Cal., and Baltimore, Md., via the Panama Canal, touching at San José de Guatemala and other Central American ports.

FINANCE.

The legislative assembly approved the national budget for the fiscal year ending June 30, 1920, amounting to 81,119,294 pesos currency, distributed as follows: Administration and justice, 7,885,530; foreign relations, 3,539,356; treasury, 4,974,702; public credit, 23,139,148; industry, 7,514,482; public instruction, 8,974,547; war, 9,770,611; pensions, 875,917; and for reconstruction of Government buildings, 15,000,000 pesos. The appropriation for public instruction shows an increase of 800,000 pesos.

In order to obtain funds for the reconstruction of the central post office and national telegraph and telephone building in Guatemala city, the President issued a decree in April, 1919, establishing a reconstruction tax of two "reconstruction stamps" 12½ and 25 centavos in denomination. The former was to be attached to every letter and package, whether registered or not, sent through the postal offices of the Republic, for either local service or otherwise, while the 25-centavo stamp is to be attached to all telegraphic or cable messages sent through the Government offices, in addition to the regular rates of telegraphic transmission.

The Guatemalan Government invited Mr. Edwin Walter Kemmerer, professor of economics and finance at Princeton University, to make a study of the economic and financial problems of Guatemala, and to act as advisor in the matter.

The following statistics are reported concerning real property

for the year 1918: Sales and donations, 12,897,267 pesos paper money; mortgages, 92,586,607 pesos paper; and cancellation of mortgages, 53,818,687 pesos paper.

The tax on raw brandy produced the sum of 11,307,471 pesos in 1918 at the rate of 3 cents per bottle, but the regular tax diminished by 2,890,813 pesos, owing to decrease in the consumption of liquor.

Interest on the Foreign Debt was paid to the amount of \$300,000 during the year 1918.

In 1918 the national treasury withdrew the sum of 309,972 pesos in bank bills from circulation, which made a total of 3,631,156 pesos withdrawn so far.

The outstanding foreign debt on Jan. 1, 1920, was as follows:

Four per cent. external debt, issue of 1895, £1,512,470; Deferred certificates issuable in respect of unpaid interest under agreement of May 10, 1923, £844,603; total £2,357,063.

The internal debt is about 136,000,000 Guatemalan pesos.

The firm of Charles E. Doddige & Co., of New York proposed to invest \$20,000,000 gold in the reconstruction of Guatemala. The company will build houses costing from \$1,000 to \$200,000 or more, so that any person may buy a home upon the payment of 10 per cent. of the total price of the house, the remainder to be paid in installments extending over a long period.

The amount of the interest on the foreign debt of Guatemala of 4 per cent. per annum was paid a year in advance, in July 1, 1919.

On April 12, 1919 the President signed a law authorizing a plan of arbitration by which the municipality of Guatemala City shall meet its obligations.

The President has granted the municipality of Guatemala City a loan of 600,000 pesos for repairs to be made on the Mexico and Pinula aqueducts.

BANKING.

The following are the principal banks:

Banco de Guatemala, Guatemala. Established 1895. Directors: Adolfo Stahl, D. B. Hodgson, José R. Camacho, Carlos Gallusser. Authorized capital, \$10,000,000.00. Capital subscribed and paid-up, \$2,500,000.00. Correspondents in New York, New Orleans, San Francisco, Cal., Mexico, Paris, London, Barcelona, Milan, and Madrid.

Banco Americano de Guatemala, Established 1895. Capital subscribed and paid-up, \$4,000,000.00. Correspondents in London, Paris, Madrid, Barcelona, Milan, Genoa, New York City, New Orleans, La., San Francisco, Cal., and Mexico. Agents and correspondents in all parts of Central America and in all cities of this Republic.

Banco Agrícola Hipotecario, Guatemala. Established in 1894. Capital, \$5,000,000. Correspondents, \$1,388,888.

Banco de Occidente. Established in 1881. Capital, \$1,650,000. Reserve fund, \$15,750,000.

Banco Internacional de Guatemala. Established in 1877. Capital, \$2,000,000. Reserve fund, \$2,253,303.

The dollar sign in each case represents Guatemalan dollar or peso.

According to the reports of the banks of Guatemala for the second half of 1918, the profits of the bank of Guatemala

amounted to 2,123,132 pesos national currency, of which 127,387 pesos were distributed among the organizers; 1,000,000 were paid in dividends, 106,156 to charitable institutions, 304,975 for an increase in the reserve fund, and 584,612 for an increase in the emergency fund. The Banco de Occidente reports profits of 2,553,212 pesos, distributed as follows: Reserve fund, 1,000,000; emergency fund, 650,000; dividends, 40 pesos per share, 660,000; additional dividend of 5 pesos per share, 82,500; tax for charitable institutions, 126,247; loss and gain account, 34,465 pesos.

In the general meeting of stockholders of the Bank of Guatemala which took place on the 9th of July, 1919, the board of directors declared a dividend of 400 pesos a share for the first six months of the year.

On April 22, 1919, the legislative assembly passed the law which provides that every bank in the country will set aside the sum of 10,000,000 pesos of a new issue of notes, representing national currency, for a fund to be called the agricultural and financing loan fund, the fund to be reserved exclusively to lend money at interest to the agriculturists of the country and to persons who were injured by the recent earthquakes, for the purpose of reconstruction. Interest on the fund is collected at 4 per cent. annually, and the loans will be for periods of not less than two years.

Banking Holidays.

January 1, New Year's Day; January 6, Epiphany; February 2, Purification; February 16, Monday before Lent; February 17, Tuesday before Lent; March 25, Annunciation-April 1, Holy Thursday-April 2, Good Friday-April 3, Holy Saturday-May 13, Ascension Day-June 3, Corpus Christi-June 24, St. John the Baptist-June 29, St. Peter and St. Paul-June 30, Reform Day-July 4, Anniversary of American Independence-July 25, St. Iago (St. James)-August 15, Assumption-September 8, Nativity-September 15, Independence Day-October 12, Discovery of America-November 1, All Saints' Day-November 2, All Souls' Day-December 8, Immaculate Conception-December 25, Christmas Day. The Fiesta de Minerva occurs on the three days following the last Sunday in October.

MONEY.

The monetary unit is the silver peso, nominally one dollar, weighing 25 grammes, of .900 fine, and divided into 100 centavos. There are no silver pesos in circulation. The money now in use in paper and fractional nickel and copper coins. The nickel coins are the real, the half real and the quarter real. Copper coins were coined in the last years, of nominal value of 25 and 12½ cents.

CREDIT SYSTEM.

The ordinary method used by importers in Guatemala is to establish a credit with some certain bank or banking house

in the United States, who then notifies the exporter's bank, in Guatemala, that upon presentation of shipping documents of any certain article the exporter is to be given the privilege of drawing at a certain rate. The usance on such bills is generally 50 points below the rate of exchange on the day of drawing. They are negotiated through the banks, banking houses, and money brokers, who will quote the day's rate of exchange upon request. The bills are domiciled in New York, New Orleans, and San Francisco. The banks receive daily cables of the New York rate of discount and exchange. "Forward" rates of New York discount are quoted at 6 per cent.

No fixed margin of profit is calculated in the purchase of first-class commercial bills, their purchase is competitive between the various banks, banking houses, and brokers.

In the import trade the commission charged for collecting clean or documentary items on Guatemala City varies in different institutions from one-half to 1 per cent.

The stamp charges on both clean and documentary items is 50 centavos per \$1,000 (equal at present exchange to about 1½ cents gold). This charge is paid by the acceptor or consignee. No deductions are ever made for stamps by the banks here on the amounts collected or no checks remitted by them in payment.

Charges for the protest of drafts are \$2.50 gold and it is paid by the acceptor. There are no other fees on dishonored items. The law of the country covering protest of items provides simply that the bank hands the draft to a licensed attorney, who presents the item to the person on whom it is drawn. If the party says that he has not the money for payment of the item or refuses to accept it for any reason, the attorney then draws up a statement of the facts on stamped paper, attaches it to the draft, and returns it to the bank. Nothing else is done, except that the bank, for itself or on account of the drawee, may bring suit and obtain judgment.

It is the custom in Guatemala for the merchant or importer to pay the collection charges on all items drawn against him. However, he always objects to doing so, making strong protest. Whether or not the collection charges should be paid by the importer should be a matter of arrangement between the American exporter and the Guatemala importer. All other supplementary and subsequent charges are paid by the importer without protest. No local bank or banking house will guarantee the payment of a draft drawn against any firm in the Republic, even after it is accepted. None of the banks in Guatemala accept goods on consignment or aid the importer in any way. The only service they render to the American exporter for the charges they make is the holding of the documents attached to the draft until it is paid; and the only protection they offer for his goods is the holding of the documents necessary to obtain the goods from the Custom House until the draft is fully paid. Consequently, the only way that the American exporter can be sure of having his draft paid, after it is accepted, is to make the draft a sight draft and instruct the bank to hold the documents until it

is paid; or, if a 60 day or 90 day draft is attached, to instruct the bank to demand guarantee that it will be paid at maturity.

PUBLIC-UTILITIES.

Public-utility development in Guatemala has made moderate progress. The cities, except Guatemala City, are comparatively small and their needs are limited. The capital is the only city possessing tramways. The system in Guatemala City is operated by mules although plans have been laid to electrify the line. 9.24 miles of lines are operated. There is also an interurban system operated by steam.

The International Railways of Central America owns 7,500 common and 190 preferred shares of the Guatemala Tramway, Light & Power Co., carried at a valuation of \$14,000. The railway company has advanced to the public-utility company the sum of \$231,166.

Huehuetenango, Quezaltenango, Totonicapan, San Marcos, Puerto Barrios, and several other towns and cities. There are also telegraph and telephone services, the latter in operation in Guatemala City and in a number of smaller cities and towns. The telephone systems were constructed as private enterprises, while the telegraph lines are mostly under State control. Upward of 1,000,000 private telegrams are handled annually.

The electric lighting and power plant of Guatemala City (Empresa Eléctrica de Guatemala) was granted a 30-year concession some 25 years ago for electric lighting and power service in the city of Guatemala. The enterprise has always been a German institution, and more than 90 per cent. of the stock was held by the Deutsche Bank of Berlin. By executive decree No. 742 of October 16, 1918, this property was taken over by the Guatemala Alien Property Custodian and by later decree was declared forfeited to the Guatemala Government and nationalized. By executive order this property has now been leased to Mr. Henry W. Catlin of New York, for the term of 10 years, at a cash rental of \$40,000 per annum, together with the option of extending the lease for an additional like period. The Government concession under which the old company operated has been extended for the life of contract and any prorogation. The lessee also becomes the preferred bidder in any future sale of the property.

The plant was erected by the Selmens-Halske (Berlin) Co., and is hydroelectric, with a present capacity of 2,000 kilowatts at 4,000 volts triphase alternating current, which is transmitted from the power station at Palin, 28 miles distant from Guatemala City. Some 16,000 incandescent lamps, 280 open arc street lamps, and 2,000 horsepower in motors are served.

Before the earthquakes of 1917-18 about 30,000 incandescent lamps were connected.

The leasing company also acquires the right to an incomplete additional water power and central station at San Luis, about 6 miles from Palin, the present operating station which, when completed, will give an additional 3,000 kilowatt.

COMMUNICATIONS.

There are 432 post offices through which passed 17,285,844 pieces of correspondence, not including printer matter, and 238,163 registered letters.

There are 261 first-class telegraph and telephone offices in operation. The telegraph system covers a length of about 7,000 kilometers. The length of the telephone lines is 857 kilometers.

The International Railway of Central America, incorporated in 1912, represents a consolidation of the following lines: Guatemala Railway, 195 miles; Guatemala Central Railway, 139 miles; Occidental Railway, 51 miles; Ocos Railway, 22 miles.

The Government of Guatemala and Salvador give a subsidy to the Company.

The International Railways of Central America, Incorporated in New Jersey in 1904, has an authorized and issued capital of \$40,000,000.

The company operated a 3-foot gauge line from Puerto Barrios, on the Atlantic coast, passing through Guatemala City, to San José, on the Pacific coast. From a point near San José the railway branches north, running to the Mexican frontier. This road has three branch lines: One to the port of Champerico, one to the village of San Felipe, and the third to the closed port of Ocos.

The distance between Guatemala City and Ayutla, on the Mexican frontier, is covered in about 12 hours. Across the Suchiate River from Ayutla is the railhead of the Pan-American Railroad. The system comprises a total of about 500 miles of track, in good condition.

The railways have on hand the following rolling stock in good condition: Engines, 66; freight cars, 1,251; passenger cars, 98; service coaches, 5; work cars, etc., 49; cabooses, 16.

The Director General of the International Railroads of Central America and the Director of the National Railways of Mexico recently hold a conference to discuss the following matters: Means of encouraging traffic between Mexico and Central America; transportation of oil for the use of the Guatemalan railways; and the construction of the international bridge over the Suchiate River. It was decided to share all expenses, taxes, fees, and advertisements and to construct on both banks of the Suchiate storehouses for oil.

The international bridge was constructed at the narrowest part of the river, it measures 400 meters, and was completed in six months at an approximate cost of 500,000 pesos, shared equally by both Governments. Across the bridge runs a three-railroad to accommodate wide and narrow gauge, since the Guatemalan roads are of this latter type. There is a driveway across the bridge for carriages and automobiles. Thus traffic will be facilitated greatly, the systems of both.

To facilitate communication the railways of both countries will extend to the bridge and merchandise be carted across, and passengers in automobiles will no longer undergo the risks nor

delays to which they are subject to-day on board the small craft which cross the river. The bridge was solemnly opened in March, 1920.

A presidential decree of June 29, 1919, approved the contract made by the Department of Public Works with Mr. Summer Farnham Shaw to survey and locate a railroad line to run from Villa de San Felipe, Department of Retalhuleu, to the city of Quezaltenango.

By the terms of a recent agreement between the postal authorities of the United States and Guatemala, the maximum weight applicable to parcel post packages exchanged between the two countries is 22 pounds instead of 11 pounds, and the postage remained the same, at 12 cents per pound or fraction thereof. This agreement became effective May 1, 1919.

PRINCIPAL DEALERS.

The principal dealers in Guatemala City who handle imported goods are:

Automobiles.

Compañía de Automóviles de Guatemala, 4a. C. P., 25; Garage Emerson's City, 4a. Av. Sur y 15 Poniente.

Glassware.

Kerrer y Co., Frente al Mercado; Widarver y Guttman; Salvador Koenigsberger, 9a. Oriente; Antonio L. del Valle, 7a. Av. del Sur 5.

Furs and Skins.

Widarver y Guttman, 8a. Av. Sur 4; Jorge Laghoff, 8a. Av. Sur 17; Lemcke y Co.; Schutt y Co., en la esq. opuesta el Hotel Unión.

Druggists.

F. Aguirre, Sta. Clara 6a. A. S.; La Moderna, J. Alcantara, 8a. Av. Sur; Alvarez y Co., Ca. de Poniente 20; Daniel Alvarez, 6a. S. P. y 4a. A. N.; L. F. Amado, 6a. C. O. y 8a. A. N.; E. Arroyave, San Rafael, 5a. Av. Sur; Matias Calderon, 9a. A. N. y 6a. C. O.; Victor Castaing, 7a. C. O. y 9a. A. S.; Jose Cordon, Av. San Jose 34. A. B. Coronado, 9a. Av. Sur y 8a. de Poniente.

Hardware.

Furrer y Co., 8a. de Oriente; J. Godoy, 6a. Av. Sur 27; B. Hermann, 9a. Av. Sur 2; Max Hengsternberg, 5 A. S. y 15 C. P.; L. Klusmann, 9a. Av. Norte 4; C. Lasker, 9a. Av. Norte 6; Brigida A. de Lisama, 5 A. S. 82; Juan Put, 7 A. S. y 8 C. O.; Nazario Rivera, 6 A. N. y 6 C. P.; San Miguel, 8a. de Oriente, y 8a. Av. Sur.

Machinery.

Compañía Belga de Centro-America; Furrer y Co., 8a. de Oriente; Lemcke y Co., 11 Oriente, 6; H. Noerbel; Payens y Co., 8a. Av. Sur; Maximo Noberschaer, 6a. Av. Sur, 27; Augusto Scharoch, 1 A. S. 12; Topke y Co., 7 A. S., 2; Carlos Tummler, 7 A. S., 4; Van de Putte y Co., El Calzador, 7a. Av. Sur, y 8a. de Oriente.

Notions.

Peyré Bondusse y Co., Av. Sur, 5; Compañía Belga de Centro-Americano; Salvador Koenigsberger, 9a. de Oriente.

Furniture.

Pío Guerra, 9a. A. S., 46; E. Minera, 9a. A. S., 88; José Paiz, 9a. A. S. 18; Nicolás Ramos, 8. C. O.; Joaquín Toledo, 15 C. O., 28.

Novelties.

Julio Aboto, 8 C. O., 14; Jorge Abularach, 8 A. S., 2; Cayetano Altono y Co., 9 A. S., 4; M. Asteguleta, 9 C. O., 1; Adolfo Blener, 9a. Oriente 3; María Castillo, 8 C. O., 4; Federico Chacon, 9 A. N., y 6 C. O.; Emilio Chinchilla, 6 A. S., 63; Wah Chong y Co., 8 C. O., 12; Guillermo Granados, 8 A. S., 2.

Perfumery.

W. Banninnnger y Co., Real 2; Peyré Bonduose y Co., Av. Sur, 5; Herman Hoepfner, 9a. Oriente 21½; David Rosemberg, bajos del Gran Hotel; Pablo Wavner, 7a. Av. Sur, 10.

Ready Made Clothes.

Antonin Chang y Co., 8a. Oriente 8; Catalina Iglesias; Cecilia Loarca, 10 C. O., 8; Isabel Obando, 8 A. S., 35; Herminia Paiz, 9 A. S., 30; Hnos. Passarelli, 9a. Av. Sur entre 8a. y 9a.; On Lon Quon y Co., 5a. Av. Sur, 17 y 50, y 9a. Av. Sur 1; Sara de Truda, 8 A. S., 2; Wo Hing y Co., 8a. Oriente frente al Sagrario.

Tailors.

Catarino J. Aceituno, 10 C. O.; Juan Aguirre, 16 C. O., 44; Felipe H. Alvarez, 5 C. O., 27; Neri Alvarez, 5 C. O., 27; Vicente Alvarez, C. R. Cementerio 18; Alberto M. Antillon, C. Córdoba 2; Antonio Antillon, 10 C. O., 5, 13 C. O., y A. S., 41; Herlindo G. Aven-
daño, 8 C. O., 28; Felipe Barrios Valdes, 8 A. S., 21; Andres Bedolla, 6 C. F., 3.

Hatters.

Oscar C. Farfan, 8 C. O., 18; Otto, 7 A. S.; Demetrio Garcia, 7 C. O., 5; Francisco Hernandez, 6 C. O., 1 C.; J. Felix G. Leal, 5 C. O., 48; Cleofás Z. Reynosa, 6 A. S., 11; Concepción Z. Reynoso, 6 A. S., 32.

Dry Goods.

Ascoli y Co., 7a. Av. Sur; Bonduose Peyré y Co., Av. Sur, 5; S. Cluró, 7a. Av. Sur; Herman Hoepfner, 9a. Oriente, núm. 21½; Luis Jalade, 10a. C. O., 5; Zadik Marcus y Co., 8a. Av. Sur, entre 8a. y 9a.; Schutte y Co., esq. opuesta al Hotel Union; Lon San Ton y Co.

Jewelry.

Jose Abularach, 6 A. S. y 9 C. O.; J. Altembach, La Joya, 9a. de Oriente 4; Jose Arriola, 5 A. S., 88; Khin Auri, 9a. Av. Sur y 9a. de Poniente; J. Barrientos, 8a. Av. Sur, 12; Pedro Beltran, 9 A. S. y 9 C. O.; A. Cáceres, 6 A. S., 40; Hnos. Comedera Latun, 12 A. N., 9; Isaac Coronado, 7 A. S. 69; Rafael Chinchilla, 3 A. N., 31.

Book-sellers.

Anderson y Amor, 10 C. O.; G. Arguedas, 6a. Av. Sur; E. Goubaud y Co., 6a. Av. Sur; J. P. Guirola y Co., 6a. Av. Sur; Lara y Co., 8 A. S. y 11 C. O.; J. M. Lardizábal, 7a. Av. Sur, y 10 de Oriente; F. Martinez, 9 A. S., 13; Padilla y Co., P. de A., 15; A. Partegás, 8a. Av. Sur 21; La Española, A. Rodriguez.

Shoes.

Julio Abril, 7 C. O. y 11 A. N.; Felipe Aldana, 19 C. O., 21; Wenceslao Alvarez, Moson Modelo; José Antillón, 5 A. S.; Justiano Bercian, A. Golfo 21; María G. Bianco, 8 A. S.; Adolfo R. Bolaños, Callejon de Adm. 11; Eusebio Castillo, 6 A. S., 17-19; Antonio Chang y

Co., 8a. de Oriente núm. 8; F. Cienfuegos, 10 A. S., 10; M. Cienfuegos, 8 A. S., 4a.; Eduardo Contreras, 11 A. N. y 11 C. P.; Antonio Cosenza, 7 A. N., 2; Fidel Díaz, 5 C. O. y 9 A. N.; Carlos Estrada, 42. Av. S., 2; Simon Francisco, 9 C. C., 16; Adriano Franco, 8 C. O., 18; Manuel B. Gallardo, 12 A. N., 8; Antonio Jimenez, C. Matamoros 5; José Juan y Co., 8 C. O., 10; Eduardo Leon, C. R. Guarda Viejo 2; Justo R. Martinez, 5 A. S., 68; José Millan, 6 C. P., 17; Hnos. Molina, 10 A. S., 37; Federico Mollinedo, 8 A. N., 2; Luis Moreira, 3 C. P., 3; A. Ortis, 11 C. O., 9; Julio Palz, Av. San José 33; Vicente Ramirez, 8 C. O.; Roque Rosito, 8 A. N. y 5 C. O.; Leoncio Salas, 9 A. S., 59; Victor Sanchez, 7 C. O., 4; Angel Santos, 6 C. P. y 4 A. N.; Alfonso Trejo, 6 C. P., 27 y 6 A. N., 3; Julio F. Vazquez, 13 C. P. y 5 A. S.;

Importers and Exporters.

José Luis Amer, 14 a. C. P., 14; Adolfo Blener, 9a. Oriente 3; Ernesto Boesche; Luis Chang; Amadeo Garcia, 9a. Av. Sur, 3; Federico Gerlach, 11a. C. P.; E. Gouband y Co.; Carlos Hegel; Alfredo Herbruger; Ernesto Koller, Real 3; Antonio Lavagnino, 11a. Av. S., 5; Maegli y Co.; Antonio Martinez y Hno.; Hnos. Monteros, 14a. C. Poniente 7; J. Tomas Ogarrio, 9a. Av. Norte; Jorge Ortega, 8a. C. O., 22; Payens y Co.; G. C. Peyans; I. Rivera y Co., 9a. Av. Sur 12; Rafael Rodezno, 8a. Av. Sur, 113; Juan Luis Saravia, 6a. Av. Sur 8; Schwatz y Co., Real; Maximo Stahl y Co., 6a. Av. Sur 15.

Stationery.

Anderson y Amos, 10 C. O.; G. Arguedad, 6a. Av. Sur; Francisco Aviles, Av. Sur 15; Gouband y Co., Ltda., 6. A. S.; Guttman & Widdawer, 8a. Av. Sur 4; Lara y Co., 8a. A. S. y 10 C. O.; José M. Lardizabal, 7 A. S. y 10 C. O.; F. Martinez, 9 A. S., 13; Padilla y Co., P. de A., 13; Antonio Partegás, 8 A. S., 1; Antonio Rodriguez, 8 C. O., 3; Arturo H. Rodriguez, 8 C. O., 18; Sanchez & Guise, 8a. Av. Sur, 24 y Carmen; Alfredo Sosa, 9a. Av. Sur 63.

Milliners.

Mme. Artaud, P. de A., 3-5; Ana Maria de Garcia, 6 A. S., 21; Gabrielle Piot 6 A. S., 17; C. e Santiago Bertha, 6 A. N., 2; Maria Ydigoras, 6 A. S., 2.

HAITI.

The Republic of Haiti, which embraces the western portion of the Island of Santo Domingo, has an area of about 10,204 square miles, and a population of about 2,500,000. Its size is a little larger than the State of Maryland, but its population is about double. It is populated mostly by negroes, although a great number are Mulatto Haitians. There are about 5,000 foreigners.

The general census taken in the Republic, between September, 1918, and August, 1919, shows a total population of 1,631,250. However, according to a statement made public by the authorities, this figure should not be taken as accurate, as it appears that for various reasons thousands of people were not included in the returns.

The population of Port-au-Prince is 100,000 inhabitants; Cape Haiti, 30,000; Cayes, 12,000; Gonaives, 13,000; Port de Paix, 10,000.

French is the language of the country.

GOVERNMENT.

Haiti has a republican Constitution. The government consists of a President and a Congress formed by two Chambers.

The President is Sudre Dartiguenave, elected August 12, 1915, for seven years.

The Cabinet of the Haitian Government is as follows: M. Constantin Benoit, Secretary of foreign relations and justice; M. Fleury Féquiere, Secretary of finance and commerce; M. Dantes Bellegarde, Secretary of public instruction and worship; M. Louis Roy, Secretary of agriculture and public works; M. B. Dartiguenave, Secretary of interior.

The text of the new election law was published August 27, 1919. This law, which grants suffrage right to every male Haitian of the full age of 21 years, provides for the establishment of several new constituencies. After the results of the census are known the number of representatives in the legislative assembly will be established on the basis of one member for 60,000 inhabitants: until then their number will be limited to 36.

On June 19, 1918 the New Constitution of the Republic was submitted to a plébiscite and was approved by 85,775 votes to 850. The most important modification of the new fundamental law relates to the power given to foreigners to acquire real estate. Article 5 of this law grants foreigners residing in Haiti, societies formed by foreigners because of the requirements

of their residence, agricultural, commercial, industrial, and educational enterprises, the right to own real property. This right expires five years after the foreigner in question ceases to reside in Haiti or after the suspension of operations of said companies. The new constitution was published under date of June 19, 1918.

On June 13, 1919, the President of the Republic promulgated a law for the protection of trade-marks in accord with the resolutions adopted at the Pan-American Conference held in Buenos Aires in 1910. The law provides that a bureau for the registration of trade-marks in Haiti be established in the chamber of commerce of Port-au-Prince.

PRODUCTS.

The mineral resources of Haiti have not been developed to any large extent. Mines of gold, silver, copper, iron, antimony, tin, sulphur, coal, kaolin, nickel, gypsum, limestone, marble and other products are found in the country, but so far only a few concessions for working copper, coal and iron mines have been taken advantage of.

Agriculture is the main industry of the country, and the most important product is coffee, of excellent quality, which is produced in several districts. Cocoa is also grown and the cultivation of sugar cane has increased considerably in the last few years. A large sugar mill, with American capital, has just been built near Port-au-Prince. Cabinet and dye woods are produced and exported.

Owing to the drought which materially reduced the crops in different parts of the country the President of the Republic, by a decree dated September 12, 1919 prohibited the exportation of corn, rice, millet, cassava, potatoes, beans, bananas, white and sweet potatoes, starch, fowls, and coal. The decree covers in a general way all foodstuffs produced in the country.

The export of castor beans has largely increased, and at this time much attention is being paid to their cultivation, to which none was previously given. The plant grows wild in all parts of the country, and the industry will certainly prove to be a profitable one.

A large sugar company has expended more than 2,000,000 dollars in erecting an extensive plant, providing buildings for the employees, and clearing for cultivation large tracts of land, principally in the plains of the Cul-de-Sac. This company gives employment to about 1,500 laborers, in addition to the skilled workmen.

Two other large sugar plants will be established shortly in the Quartiermorin and Fort Laliberte.

An experimental farm has been established at Thor, commune of Port-au-Prince, by the Government. A number of boarder students, whose expenses are paid by the department of state, are already attending the agricultural courses given at the farm, and a circular has been sent by the Government to the municipalities throughout the country requesting them to send additional students. The boarding rate is only \$11. per month.

Mr. W. L. Rockwell, of the Bureau of Public Roads, United States Department of Agriculture, and Mr. E. R. Sayler, Chief Engineer, have made an extensive report on a project for the irrigation of a large territory in the region of Cul-de-Sac. The cost of building a modern system of irrigation in this region is put at 1,400,000 gourdes.

The Government will undertake at once extensive irrigation work in the plains of L'Arcachale and Leogane.

An analysis made in France of the seeds of the sand-box tree (*Huracrepitans*) has shown that a much larger quantity of oil can be extracted from these seeds than from the castor beans. Should the sand-box oil prove to be as valuable to the industry as the castor oil—and some experts believe it will—Haiti would largely benefit by the discovery of this new vegetal product, for the tree thrives in the greater part of the Republic.

The Government has entered into a contract with the Caribbean Agency of New York, whereby the latter receives for a period of nine years the exclusive privilege of gathering the bark of all the mangroves to be found in the territory of the communes of Fort Liberte, Terrier Rouge, Caracol, and Limonade; the Caribbean Agency agreed to pay a duty of \$1 per ton of bark exported.

TRADE WITH THE UNITED STATES.

The trade with the United States shows considerable progress, as shown in the following table:

Years	American goods Imported	Exports to the United States
1909	\$3,937,359	\$525,947
1910	4,498,449	790,579
1911	5,358,761	813,713
1912	7,271,999	800,178
1913	6,640,265	874,731
1914	5,540,705	691,807
1915	3,184,618	1,542,836
1916	6,542,979	2,560,340
1917	7,370,396	4,234,531
1918	8,359,922	4,815,544

In 1917, Haiti exported merchandise to the United States, as follows:

Chemicals, drugs, dyes, and medicines, \$1,539; Cocoa, or cacao, crude, \$406,068; Coffee, \$2,311,618; Copper, and manufactures of, \$8,768; Cotton: Unmanufactured, \$375,956.

Dyewoods, in a crude state, \$594,714.

Fertilizers, \$6,809; Fibers, vegetable, and textile grasses, unmanufactured—Sisal grass, \$18,497; Fruits and nuts, \$3,243.

Hides and skins (except fur skins), raw or uncured, \$251,530; Honey, \$93,644.

Oil cake, \$3,401; Oils, \$75,972.

Seeds, \$322,778; Sugar-Cane, \$164.

Wax, \$17,098; Wool, and manufactures of, \$78,383.

Haiti imported American products in 1918, as follows:

Agricultural implements, and parts of, \$24,710; Asbestos, manufactures of, \$11,575.

Blacking, shoe paste, etc., \$15,448; Brass, manufactures of \$9,909; Breadstuffs, \$165,793; Brushes, \$2,677; Buttons, and parts of, \$3,730.
 Candles, \$6,071; Cars, automobiles, and other vehicles, \$227,220; Celluloid, and manufactures of, \$2,879; Cement, hydraulic, \$83,473; Chemical, drugs, dyes, and medicines, \$64,964; Coal and coke, \$11,924; Copper, and manufactures of, \$33,365; Cotton, and manufactures of, \$2,696,510.
 Earthen, stone, and china ware, \$34,308.
 Electrical machinery, appliances, etc., \$146,311.
 Fibers, vegetable, manufactures of, \$253,549; Fish, \$200,645; Fruit and nuts, \$13,263; Furniture of metal, \$3,798.
 Glass and glassware, \$17,739; Grease, lubricating, \$5,834.
 Hats, \$17,028.
 India rubber, manufactures of \$24,913; Instruments, and apparatus for scientific purposes, \$3,409; Iron and steel, and manufactures of, \$1558,196.
 Jewelry, \$1,149.
 Lamps (except electric), \$6,861; Leather and manufactures of, \$176,054.
 Matches, \$8,375; Meat and dairy products, \$572,059; Musical instruments, and parts of, \$3,760.
 Naval stores, \$5,005; Nickel, nickel oxide, and matte, \$42; Notions, not otherwise classified, \$11,165.
 Oorkum, \$6,523; Oilcloth and linoleum, \$13,088; Oils, \$250,797.
 Paints, pigments, colors, and varnishes, \$31,632; Paper and manufactures of, \$68,893; Perfumery, cosmetics, etc., 7,766; Phonographs, graphophones, and gramophones, and records, and materials for, \$7,709; Photographic goods, \$6,884; Plated ware, \$4,580.
 Roofing felt and similar material, \$4,433.
 Shoe findings, \$27,105; Silk, manufactures of, \$7,753; Soap, \$745,426; Spices, \$6,242; Spirits, wines, malt liquors, etc., \$90,731; Straw and palm leaf, manufactures of, \$1,591; Sugar, refined, \$6,185; Surgical appliances (not including instruments), \$6,131; Suspenders and garters, \$5,028.
 Tobacco, and manufactures of, \$210,684; Toys, \$2,133.
 Vegetables, \$11,683.
 Wood and manufactures of, \$184,044; Wool and manufactures of, \$8,544.

The foreign trade of the Republic of Haiti during the fiscal year ending September 30, 1917, amounted to \$15,826,34. Of this, \$8,606,055 were the imports and \$7,220,289 the exports. The chief countries of export were: United States, \$3,926,953; France, \$3,023,691; and United Kingdom, \$61,182. The principal articles of export were: Coffee, 46,384,084 pounds, valued at \$4,620,553; logwood and logwood extract, 93,574,169 pounds, valued at \$769,679; cocoa, 3,891,997 pounds, \$489,694; cotton, 2,517,880 pounds, \$355,367; honey, 1,760,998 pounds, \$191,095; goatskins, 355,090 pounds, \$181,884; hides, 355,587 pounds, \$109,621; lignum-vitae, 15,592,106 pounds, \$107,112; cotton seed, 3,731,754 pounds, \$76,808; corn, 1,114,202 pounds, \$53,516; cotton oil, 940,911 pounds, \$53,023; castor beans, 853,467 pounds, \$49,540. The principal countries of imports were United States, \$7,478,228, nearly 87 per cent. of the total; France, \$393,317; and United Kingdom, \$591,777.

The steamship Juno left Port-au-Prince in March, 1919, with a cargo of 5,000 sacks of sugar. This was the first export of Haitian sugar since the declaration of independence.

SHIPPING.

The several steamship lines operating vessels between Haiti and the foreign ports have resumed their regular service. Among

them is the Royal Dutch West India Mail, one of the most important lines touching at Haitian ports. Steamers of this company usually go from New York to Amsterdam, via the West Indies. The service is bimonthly, both freight and passenger. The Compagnie Générale Transatlantique maintains a monthly passenger and cargo service between Havre, France, and the principal Haitian ports. The Raporel Line, has a bimonthly service between New York and all the Haitian ports.

The first direct steamship service between Great Britain and Haiti since 1899 began November 12, 1919.

CUSTOM REGULATIONS.

Requirements for shipping documents are as follows:

Six copies of each invoice are required to be presented for certification, the consul retaining four copies and returning two to the shipper, who must send one to the consignee by the boat which carries the shipment. Each copy of the invoice must be accompanied by a copy of the bill of lading, which must also be certified by the consul. Packages must bear consecutive numbers, the net weight in pounds, the counter marks, and the name or initials of consignees. The declaration, invoices, and bills of lading, as well as all other papers used in connection with the manifest, should bear the same marks, names and countermarks. Shipments of cordage and beer require a certificate of origin (English or French) from the manufacturers. No special form is provided for such certificates, which must be sworn to before a notary public and certified by the consul together with the invoice. A fee of \$1 is charged for certifying set of six consular invoices and six bills of lading, and 50 cents for legalization or vise of certificate or origin. Consular blanks cost 6 cents per set of six. There is, in addition, a consular vise fee of 1 per cent. ad valorem, collected at port of destination, from the consignee.

Haiti has the following consulates in the United States: Boston, Mass.; New Orleans, La.; New York, N. Y.; Wilmington, N. C.

FINANCE.

The national budget for the fiscal year 1918-19 was \$3,999,646 gourdes for the revenues and 3,057,803 gourdes for the expenditures. The expenditures were made up of the following items: Department of foreign relations, 48,240 gourdes and \$87,973; treasury and commerce, 649,530 gourdes and \$11,949; interior, 491,049 gourdes and \$1,204,191; public works, 226,900 gourdes and \$464,730; agriculture, 37,872 gourdes and \$8,288; public instruction, 1,490,691 gourdes and \$41,116; justice 842,180 gourdes and \$35,772; worship, 40,681 gourdes and \$59,850; bank, 59,696 gourdes and \$45,639; expenses collector general's department, 95,850 gourdes and \$148,717; and public debt, 16,958 gourdes and \$949,578.

A law promulgated on September 2, 1919, authorized the President to place at the disposal of the secretaries of state in

charge of the public departments credits totaling 4,602,774 gourdes and \$3,748,498. These credits, which will be employed to cover departmental expenditures during the fiscal year 1919-20, are distributed as follows: Foreign relations, 46,140 gourdes and \$89,277; finances and commerce, 814,180 gourdes and \$9,688; interior, 494,727 gourdes and \$1,306,788; public works, 223,900 gourdes, and \$622,380; agriculture, 60,236 gourdes and \$8,110; public instruction, 1,652,665 gourdes and \$65,969; justice, 1,069,935 gourdes and \$31,772; worship, 40,680 gourdes and \$59,850; public debt reserve fund, \$1,000,000; various governmental services 200,309 gourdes and \$554,573.

Negotiations are under way by which the whole foreign debt of Haiti is to be taken over by American interests. The finances of the country are now under American supervision, and the negotiations for the transfer of the debt were initiated by the financial adviser, Mr. John Molhenny, and the National Bank of Haiti, which is a branch of the National City Bank of New York.

The foreign debt amounts to about 120,000,000 francs, and is mostly held in France. The internal obligations amount to about \$7,000,000 and the loan made by the City National Bank would cover also about five million dollars for the development of the country.

BANKING.

The Banque Nationale de la Republique of Haiti (National Bank of the Republic of Haiti) is the principal banking institution of the country. It was established in 1910, with a paid capital of ten million francs. In 1916, the National City Bank of New York bought the control of the bank.

The Credit Lyonnais, the well-known French financial corporation will soon establish a branch in Port-au-Prince.

The President of the Republic has authorized the Royal Bank of Canada to establish a branch office in Port-au-Prince and transact a general banking business in the country.

The Banque Nationale d'Haiti (National Bank of Haiti), has been authorized by the council of state to issue bank notes to the amount of 20 millions gourdes.

The Gourde, or dollar, the nominal value of which is 1 dollar, is the standard value of Haiti. There are also nickel coins of 50, 20, 10 and 5 centime pieces, and bronze of 3, 2, and 1 centime pieces.

The money in circulation consists of paper money, 8,289,812 gourdes; nickel coins, 7,000,000 gourdes; bronze coins, 225,000 gourdes; total, 15,514,812 gourdes.

Banking Holidays.

January 1, New Year's Day; Independence Day; April 1, Holy Thursday; April 2, Good Friday, May 1, Agriculture Day (Labor Day); May 13, Ascension Day; June 3, Corpus Christi; August 15, Assumption; November 1, All Saints' Day; November 2, All Souls' Day; December 25, Christmas Day.

COMMUNICATIONS AND PUBLIC WORKS.

The total length of railways in Haiti is 64 miles.

From Port-au-Prince to Lake Assuéi (a distance of 28 miles), and to Léogane, a distance of 22 miles, a light railway has been constructed. A concession was granted the "National Railroad Company of Haiti," for a railroad from Cape Haiti to Port-au-Prince, and it is now in construction. Port-au-Prince has 5 miles of tramway.

The civil engineer in charge of the survey of the projected railway line from Port-au-Prince to Mariani has completed his work.

A recent decree appropriated a further sum of \$2,000 for the completion of the road being constructed between Thomazeau, Mirebalais, and Hinche.

Under date of September 18, 1919, the first delivery of a bag of dispatches by an airplane at Port-au-Prince took place. This was the first air mail trial ever attempted in Haiti.

A presidential decree of September 6, 1919, appropriated a sum of \$25,000 for the construction of a road linking the town of Ennery and Hinche through St. Michel and Maissade.

PRINCIPAL DEALERS.

The following is a list of the principal dealers of Port-au-Prince:

Hardware

H. Brisson; Delinois y Co.; Th. Dossows; Borbes y Edeline; Augusto Gabriel; Eduardo Gabriel; V. Nevete; H. Prézeau; Roux y Co.; Salomon.

Dressmakers.

R. Bastien; H. Clarier; Chapoteau y Co.; A. L. Guérin; A. Guyot y Co.; Nord Fr. Joseph; Ph. Kieffer; Molière; Painson; G. Serre.

Perfumery.

Oreste Balloni; A. Guyot y Co.; Philipp Karlsson; Matteis y Co.; Arturo Rosso.

Notions.

Aux armes de Paris; Orestes Balloni; Bibliothèque Haitienne; H. Brisson; Delinois y Co.; H. Dossows; Borbes y Edeline; Augusto Gabriel; Eduardo Gabriel; A. Guyot y Co.

Dry Goods.

Remy Bastien; A. y E. Boutin; Enrique Brisson; Chapoteau y Co.; Eliz Cheriez; L. d'Espinose; Ch. Gauthier; Lucas Oloffson y Co.

Glassware.

Enrique Brisson; Chapoteau y Co.; Felix Cheriez; Delinois y Co.; D'Ennery Dejole; Evans y Co.; Fritz Jaeger; H. Prézeau.

Druggists.

Bayard; Central; L. Parisot; Louis Saint; Nouvelle; F. Sejourné.

Hardware Store.

Green Knaebel y Co.; Carlos Mews; F. E. Mews; L. Mews y Co.; P. E. Painson; L. Peloux y Co.; Enrique Starch y Co.

Books and Stationery.

Aux armes de Paris; Bibliothèque Haitienne; Alberto Horelle; Moderna; M. Robelin.

China-ware.

Enrique Brisson; Chapoteau y Co.; Felix Chertez; D'Ennery Dejoie; Delinois y Co.; Evans y Co.; Fritz Jaeger; Cleblé Martin; H. Préceau.

Importers and Exporters.

Adolfo Allien; Remy Bastien; A. y E. Boutin; Victor Bouzy; Enrique Brisson; H. Brisson; Jorge Coby; Chapoteau y Co.; Felix Chertez; D. Ennery Dejoie; Delinois y Co.; Th. Dossous; Borbes y Edeline; L. Espinosa; Eduardo Esteve y Co.; Etienne e hijos; Andres Faubert; Augusto Gabriel; Ch. Gauthier; R. H. Gordon; F. Hermann y Co.; A. Holelle; G. Kietel y Co.; Ph. Kleffer y Co.; V. L. Langendon; Languendonk y Co.; L. Laraque; H. Laville; N. Lemoyne y Co.; A. Litorelle y Co.; Cleblé Martin; Carlos Mews; L. Mews y Co.; Emmanuel Moises y Hnos; Volcins Nerette; J. R. Nortz y Co.; Oloffson Lucas y Co.; P. E. Painson; L. Peloux y Co.; Eduardo Polynice; Enrique Prezean; G. Revest; A. Ricco; Roure y Co.; Hnos Sommonds; Enrique Starch y Co.; H. y A. Stecher; Justino Thomas.

HONDURAS.

Honduras is the third largest of the Central American Republics being about the size of the State of Mississippi, but more sparsely populated. It has an area of 46,250 sq. miles, and according to the census of 1910, it has a population of 553,446 inhabitants.

Honduras adopted the unitary, republican form of government when she seceded from the Central American Federation. The constitution expressly provided, however, that the said instrument should not bar the Republic from again becoming a State of the Federation, and that the constitution may at any time, for that purpose, be abolished or amended by Congress.

The usual division of the Government into legislative, executive and judicial branches is retained. The Chamber of Deputies is the only branch of Congress, and consists of 42 members. They are elected by direct vote for a term of four years at the rate of one deputy for every 10,000 inhabitants. The Chamber is renewed by halves every two years.

All citizens over 21 years of age, or over 18 years of age, married, and who read and write, have the vote. Congress meets annually at the capital, Tegucigalpa, on the 1st day of January for a period of 60 days. This may be extended 40 days at its discretion or at that of the President of the Republic, who may also convene Congress in extraordinary session. In case of the death or disability of either the President or Vice-President, three designados are elected to take their places.

The President and Vice-President are elected by direct vote for a term of four years, and may not be reelected for the next consecutive term. A Cabinet of six ministers assists the President. They are appointed by him but responsible to Congress.

President Francisco Bertrand, whose term expired in February 1, 1920, was overthrown by a revolution in September 1919. He fled and left the Government in the hands of the ministry. On October 5, 1919, the Vice-President, Francisco Bogran, was sworn as acting President and organized his Cabinet. He called an election and general Rafael López Gutiérrez was elected President, with Dr. José María Ochoa Velázquez as Vice-President. Both of them were inaugurated.

MINERAL RESOURCES.

Honduras is mainly an agricultural country, although it is certain to have mineral resources.

About 700 mines in all have been denounced. Denouncements have been made of silver, gold, lead, copper, kaolin, crystal, iron, opals, marble, saltpeter, aluminum, chalk, coal, antimony, zinc, nickel, and asphalt.

While numerous mining claims are held, and attempts have been made to develop many of them, there is only one important mining property being operated at the present time. This is the New York & Honduras Rosario Mining Co.'s mine at San Juancito. This long-established American company has been highly successful, and its record of silver production is probably the best for any silver mine in Central America during modern times. In addition to its Rosario properties at San Juancito the company has been experimenting with various prospecting concessions at Chile Mountain, Guasucaran, Department of Tegucigalpa, and Santa Rosa de Potosi, Department of Choluteca. The Chile Mountain concession, located about 20 miles east of San Juancito, was prospected during 1916, but without sufficient encouraging results to make further investigation desirable. Development work was also carried forward in the Guasucaran and Santa Rosa de Potosi properties.

Dividend payments for the calendar year 1917 totaled \$400,000 or 20 per cent. on the \$2,000,000 stock outstanding.

A number of other properties are being or have been operated in a small way during recent years. The Santa Lucia Mine near Tegucigalpa, a famous producer during the Spanish period, is now under the management of local interests. It is claimed that large returns could be realized from this property, if it were extensively developed. The Socorro Mine, in the district near Tegucigalpa, which covers an area of about 300 acres and produces gold and silver, is the property of the Socorro Gold & Silver Mining Co., a British concern capitalized at 120,250. The Antigua Gold-Copper Co., an American company incorporated in 1917, with a capitalization of \$2,000,000, acquired 531 acres at Minas de Oro, Department of Comayagua.

Copper ores are found in almost every Department of Honduras, but the mines are usually small and development has been very limited. Thus far the most promising deposits have been located in the Departments of Tegucigalpa, Comayagua, and Yoro. In the latter Department a vein is said to have been located with a width in places of as much as 14 feet, extending, it is claimed, for miles and giving ores "assaying 15 to 16 per cent. copper."

Mineral traces and abandoned Spanish workings are widely scattered throughout the Republic. An extensive iron deposit exists at Agalteca, about 48 miles northwest of Tegucigalpa, this ore body being said to contain 100,000,000 tons. Efforts made to raise sufficient capital to develop this ore body, have thus far been unavailing. Iron is found in other sections of the mountain ranges.

Gold washing is carried on in many of the streams, and sometimes 1,000 or more of the inhabitants are daily engaged in the work.

The rich gold and silver mines of the Opoteca region in

the Department of Comayagua will soon be actively developed. An automobile road to Siguatepeque and the Yojoa is now under construction, by which communication with the Atlantic coast will be obtained.

The San Antonio Mine, distant about 30 miles from Tegucigalpa, and which is believed to contain rich deposits of silver ores, is being worked on a small scale by Honduran capitalists with the object of fully determining the extent and value of the deposits before attempting to exploit same on an extensive scale. The mine was formerly very productive.

Under a contract made by the Executive Power with Antonio Rivas, Rofael Alduvín L., Casimiro Cáliz, Antonio M. Callejás, and Humberto Ferrari G., they are given the authority to extract, refine and export petroleum, coal, naphtha, and other hydrocarbons in the Departments of Colón, Olancho, El Paraíso, and the Mosquitia Territory. Each exploitation zone will have an area of 1,600 hectares and is to be surveyed by an engineer appointed by the Executive. The concessionaires may bring into the country free of duty such machinery and utensils as may be necessary for use in the work. They also have the right to use Government lands and the timber found thereon to such an extent as may be required for the establishment and development of the business. The sale and export of the products produced are exempt from Government taxes and duties. The concessionaires agree to sink a shaft at least 2,000 meters deep within two years from the approval of the contract by Congress, and to cede to the Government 10 per cent. of the gross output of crude petroleum or other hydrocarbons that it may extract. The rights acquired may be transferred to any person or company, but in no case to foreign Governments or States corporations.

During the latter part of June, 1919, three American engineers, employed by the Honduras Petroleum Co. to prospect its petroleum concession in the Departments of Comayagua, Yoro, Atlantida, and Cortés, arrived in San Pedro Sula. Two of these engineers will have charge of the construction of the highway from Siguatepeque to the South bank of the Yojoa Lake. Eighteen kilometers of this road have been opened to public service. The duration of the contract is 25 years, and the concessionaires or their successors, even though they be foreigners, are subject to the jurisdiction of the courts of the Republic.

The Government has granted concessions to Mr. J. P. Henderson for the production, exploitation, refining, and exportation of oil, coal, naphtha, and other minerals discovered in the Departments of Tegucigalpa, Olancho, Santa Barbara, and Mosquitia.

Permission has been granted for the exploitation of nitrate deposits in the Departments of La Paz, Intubuca, Comayagua, Gracias, and Tegucigalpa.

AGRICULTURAL PRODUCTS.

The territory of the Republic is mountainous throughout, and resembles that of Costa Rica, with a similar diversity of

climate, soil and products. Its large and fertile plateaus and valleys produce nearly all the tropical crops and offer excellent pasturage to cattle. The plain of Comayagua is 40 miles (65 kilometers) in length. Mahogany is the most important wood of the several varieties contained in the forests. While coffee, cocoanuts, rubber, indigo, cattle, hides, and other agricultural products are shipped, bananas are the principal article of export. Considerable quantities of sarsaparilla, for which Honduras is noted, are exported annually to the United States.

It is estimated that the zone tributary to and through which the National Railways of Honduras passes could be made to produce annually 2,400,000 bunches of bananas, 12,000 tons of dyewoods, and 10,000 tons of corozo nuts. That section of Honduras contains large quantities of cork, which could be easily collected and made ready for export to the markets of the United States and Europe.

The United Fruit Co. has been the prime mover in the agricultural development of Honduras. This company had invested over \$7,000,000 in the Republic, this including \$917,130 in lands, \$849,641 in cultivation; \$805,028, in houses and other buildings; \$777,408, in railways; \$253,651, in wharves and lighters, etc. The company owns 18,435 acres of improved and 144,702 acres of unimproved land, and leased 170 acres of improved and 16,938 acres of unimproved land. Of the land under cultivation, 12,914 acres were used for raising bananas; 97 acres for coconuts, and 21 acres for rubber. In addition, 1,531 acres were used for pasturing live stock, 420 head of cattle, 977 mules and horses, and 143 animals being owned. The railway and tramway lines serving the company's properties totaled 183 miles, and 9 miles, respectively.

In addition to the United Fruit Co., extensive plantations are owned by Vaccaro Bros. & Co., the Cuyamel Fruit Co., etc. There are also a number of independent planters.

Up to an elevation of about 3,000 feet, the banana in Honduras grows wild in practically all parts of the country. The cultivation of this fruit for export is confined to the rich, hot lands along the north coast and not extending farther inland at any point than 50 or 75 miles. The main shipping points are Puerto Cortés, Ceiba, and Trujillo.

Coffee is grown chiefly in the hill country at altitudes of from 1,500 to 3,000 feet (about 500 to 1,000 meters).

Honduras would become a great producer of sugar if there were better means of communication and transportation facilities.

The yield of cocoanuts in Honduras is steadily increasing and planting is going on both on the mainland and on the nearby islands. The bulk of the crop comes from the Bay Islands, which produce over 10,000,000 nuts.

The President promulgated recently a law under which the Government offers a bounty for the cultivation of Henequén (*cabulla sisal*), and other fibrous plants recommended by the Department of agriculture, the cultivation to be made at places indicated or approved by the Department.

No bounty will be paid unless 5 or more hectares are cultivated, each hectare to contain not less than 2,500 plants not

more than 4,000, the distance between the plants to be such as experience has proved to be proper. The bounty offered is 15 pesos per hectare, one half of which is due one year after the plant is set out and the remainder at the time of cutting the leaves for the production of fibre. Persons engaging in this industry under said law are exempt from national and municipal taxes, customs duties on imports of machinery and supplies directly used in connection with the industry, and from export duties on fiber shipped abroad.

With the exception of a strip of low coast land adapted to tropical fruits, a great part of Honduras is admirably suited the raising of cattle. Most of the interior is excellent grazing country, said to rival the plains of Argentina. With its even climate and ever-growing vegetation cattle thrive almost without care.

Owing to the present slight demand only a few cattle find their way out to the coast, merely sufficient to supply the local demand for beef and the limited number exported on foot, principally to Belize, British Honduras. There has, therefore, been but little incentive to develop the industry and practically no effort made to improve the breed or to produce any great number. Native cattle are generally small, not weighing over 400 to 500 pounds. These can be purchased and brought to the coast for about \$25 a head (United States currency). However, the number now produced is considerable even with the limited demand.

A liberal estimate for the existing herds is about 500,000 head.

The cohune or corozo nut industry dates out from the World War. With the demand for combating the use of poison gas in the war, it was found that the shell of the cohune nut when carbonized, acted as a preventive against the injurious effects of the gas. The United States Government organized the machinery for handling the industry on a large scale, but with the termination of the war the demand ceased. The utilization of the cohune nut for war purposes, however, served to bring to light an industry which may be permanent, namely, the extraction of oil from the kernel of the nut.

The cohune or corozo nut is a product of the manaca palm, indigenous to tropical countries, and is found mostly on low, damp lands, along creeks and rivers. It thrives best in the deep forest, and the greatest supply is found in virgin forest lands in Honduras.

The oil is high grade, said to be superior to coconut oil, and finds a ready sale for cooking purposes, the preparation of foods, or any use to which a good cooking oil may be put.

Honduras is said to be at present the most important source of cohune nuts in Central America. The greatest supply is found on the lowlands toward the eastern portion of the north coast.

FISHING.

Honduras waters from Trujillo to Cabo Gracias a Dios comprise one of the richest maritime fish producing zones in the world. These waters also abound in turtles, including the ma-

rine, green, and other varieties, as well as shellfish, such as periwinkles and crabs. The zone referred to offers remarkable natural advantages for the establishment of a company to engage in fishing and preparing the catch for the market. The fishermen of Bahia Islands could supply the labor for such an undertaking in so far as providing the sea food is concerned, and the ports of La Ceiba, Trujillo, and Granaja could be used as factory sites.

MANUFACTURING.

The records of the Department of Promotion of the Honduras Government show that the industrial establishments are distributed as follows: Department of Tegucigalpa. Two small shoemaking plants; two small soap and candle factories, three makers of bottled soft drinks; one ice plant, two small breweries; one factory making sugar and rum; one small gristmill; one small sawmill; two small cigar and cigarette factories; one hat factory; two brick factories; one marble yard; two small bakeries; one small candy factory; one leather-working.

Department of Atlantida:—One factory of soda water; two soft drink and two ice factories, and one distillery.

Department of Valle:—One soap, and four soda water factories; one ice factory, and one tanning plant.

Department of Choluteca:—Four soft-drink bottling establishments; one brick and cement factory; one tanyard, and two stills.

Department of Cortés:—One soap and candle factory; two distilleries; one soft drink, and three ice factories.

Department of La Paz:—Two distilleries, and one wine factory.

Department of Islas de Bahia:—One soft-drink factory; one ice making and ice cream, and two boat-building yards.

Department of El Paraíso:—Four stills and one soft-drink factory.

Department of Copan:—Thirteen factories making cigars, and four stills.

Department of Colón:—One ice factory.

Department of Yoro:—Three stills.

Department of Santa Bárbara:—Five stills; one sawmill, and one soap, candle, and ice factory combined.

Department of Ocotepeque:—One gristmill, and one still.

Department of Olancho:—Two straw-hat factories, and two stills.

Department of Gracias: One straw-hat factory, and two stills.

Department of Intabuca:—One hat factory (straw or palm), and one still.

Department of Comayagua:—Four stills.

Permission has been granted by the Government to Ing. Ruben Bermudez H. to establish a flour mill in San Pedro Sula to operate for the period of 10 years, with a capacity for milling 25 barrels, of 200 pounds each, of wheat daily, the plant to be exempt from all fiscal or municipal taxes in operation or to be established during the term of the concession.

The Government has also granted privileges and concessions for the establishments of the following new factories: In La Ceiba, one of perfumes of all kinds; in San Pedro Sula, of perfumes, sugar, and alcohols; in the Department of Cortés, of alcoholic liquors, both strong and light wines; and a shoe factory with a tannery for hides in the city of San Pedro Sula.

FOREIGN TRADE

Covering the 10-year period from 1907-8 to 1916-17, the foreign commerce of Honduras amounted to \$76,088,713 American money; made up of imports, \$44,375,520, and exports, \$31,713,193.

During the six months ending June 30, 1919, 4,038 tons of merchandise were imported through Amapala in 39 vessels, 37 of which were United States ships and 2 British. During this same period 500 tons of products were exported, 597,997 pounds of coffee constituting the major part of the shipments. Of the total coffee exportation 50 per cent. was shipped to Havre, over 48 per cent. to San Francisco, and the remaining amount to London. Bullion value at \$873,533 and concentrates valued at \$63,642 were exported to New York. Small quantities of indigo, hides and skins, and rubber were also shipped.

The Honduran products exported to the United States during the year 1918 were as follows:

Chemicals, drugs, dyes, and medicines, \$130,012; Coffee, \$38,828; Dyewoods, in a crude state, \$126,042; Fruits and nuts (except fur skins), raw or uncured, \$233,867; India rubber, crude, \$13,880; Sugar-Cane, \$809,071; Vegetable—Beans and lentils, \$5,902; Wood, unmanufactured, \$13,574.

Honduras imported the following products of the United States in the year 1918:

Agricultural implements and parts of, \$27,998; Aluminum, and manufactures of, \$190; Animals, \$5,459; Athletic and sporting goods, \$2,735.

Blacking (including shoe paste, etc.), \$2,986; Brass, and manufactures of, \$7,634; Breadstuffs, \$348,991; Broom-corn manufactures of, \$10,787; Brushes, \$2,960; Buttons, and parts of, \$4,289.

Candles, \$26,224; Cars, automobiles, and other vehicles, \$51,904; Celluloid, and manufactures of, \$4,030; Cement, hydraulic, \$26,432; Chemicals, drugs, dyes, and medicines, \$193,517; Chewing gum, \$9,846; Clocks and watches, and parts of, \$2,360; Coal and coke, \$35,680; Cocoa and chocolate, prepared, etc., \$4,860; Confectionery, \$14,719; Copper, manufactures of, \$10,808; Cotton, \$1,261,208.

Earthen, stone, and chinaware, \$29,749; Eggs, \$10,720; Electrical machinery, appliances, etc., \$44,753; Explosives, \$77,307.

Fibers, vegetable, manufactures of, \$30,560; Fish, \$21,026; Flavoring extracts and fruit juices, \$3,882; Fruits and nuts, \$22,178; Furnitures of metal, \$3,306; Furs, etc., dressed and manufactured, \$89; Glass and glassware, \$31,156; Grease, \$4,317.

Hats, \$17,539; Hay, \$3,004.

India rubber, manufactures of, \$42,086; Instruments, etc., for scientific purposes, \$5,312; Iron and steel, \$571,703.

Lamps, Chandeliers, and all other devices for illuminating purposes (except electric), \$6,623; Lead, and manufactures of, \$7,364; Leather, \$315,024; Lime, \$1,882.

Malt, \$2,957; Matches, \$28,162; Meat and dairy products, \$160,866; Musical instruments, and parts of, \$5,276.
 Notions, not elsewhere specified, \$3,882.
 Oil-cloth and linoleum, \$6,262; Oils, \$337,774.
 Paints, pigments, colors, and varnishes, \$41,998; Paper, \$106,798; Paraffin and paraffin wax, \$8,932; Pencils and pencil leads, \$4,078; Perfumeries, cosmetics, and other toilet preparations, \$21,142; Phonographs, graphophones, gramophones, records, materials for, etc., \$4,096; Plumbago, manufactures of, \$4,508.
 Roofing felt, and similar materials, \$1,020; Rosin, \$1,587.
 Salt, \$12,160; Shoe findings, \$3,277; Silk, manufactures of, \$6,784; Silk, artificial, \$4,463; Soap, \$47,968; Spices, \$3,848; Spirits, wines, malt liquors, and other beverages, \$71,759; Stones, and manufactures of, \$449; Straw and palm leaf, manufactures of, \$449; Sugar, refined, \$402; Surgical appliances (not including instruments), \$7,649.
 Tobacco, cigarettes, \$3,691.
 Umbrellas and parasols, \$8,183.
 Vegetables, \$50,913.
 Wood, \$201,729; Wool, manufactures of, \$7,266.
 Zinc, manufactures of, \$150.

CUSTOM REGULATIONS.

The following are the principal requirements for shipments to Honduras: Shippers of merchandise to Honduras must submit to the Consul at the port of shipment four copies of an invoice, made out in Spanish, stating the name and the address of the shipper, class and name of the vessel, name of the captain, name of the consignee, port of destination, date of departure of the vessel; marks, number of each package, gross weight of each in kilos, kind of each package, total value of invoice, giving in detail value of each package or lot of packages of uniform contents, name of the merchandise contained in each package, weight and origin of goods, and their value in American currency, and the declaration sworn to and signed by the shipper as to weight, values, etc. In case of wines or liquors, the percentage of alcohol must be stated.

Should there be neither Consul, vice consul, nor consular agent at the port of shipment, the invoices may be signed by a Consul or consular agent of any other Central American Republic, or any other friendly nation, and the signer shall observe the provisions of the law and charge the established fees. Should there be at the port of shipment none of the above mentioned officials, the shipper must prepare himself three copies of the invoice, of which he must send one by registered mail, to the Department of the Treasury of Honduras and another to the chief of customs of the port of destination, obtaining from the post office the corresponding receipts. He must indicate on the envelopes the date and port of departure of the merchandise and the port of destination. The third copy of the invoice, together with the receipts issued by the post office, must be forwarded to the consignee.

Shipments to Honduras must also be accompanied by a copy of the commercial invoice, which will be certificated by the Consul, without charge. This copy is forwarded to the consignee for presentation at the Custom House. Steamship companies require shippers from interior points to furnish two copies of the commercial invoice. Goods may be consigned direct or "to order." Separate invoices must be made for each mark, even if

the different marks represent the same consignee. Each package should be numbered. The consular fees are: For certifying four invoices, not exceeding \$25, \$1; more than \$25 but not exceeding \$50, \$1.50; more than \$50 but not over \$100, \$3; more than \$100 but not over \$500, \$6; over \$500 but not over \$1,000, \$10; above \$1,000, \$10 for the first \$1,000 and 25 cents for each additional \$100 or fraction thereof, up to \$10,000. Above \$10,000, \$32.50 plus 50 cents for each additional \$100 or fraction thereof. For certificate of loss of a consular invoice, \$2. Invoice blanks are sold at 30 cents per set of four.

There are Consuls of Honduras at Boston, Mass.; Chicago, Ill.; Detroit, Mich.; Galveston, Tex.; Jacksonville, Fla.; Kansas City, Mo.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Newport News, Va.; St. Louis, Mo.; San Diego, Cal.; San Francisco, Cal.; Tampa, Fla.; and Washington, D. C.

One month is allowed after arrival of goods for making Custom House entry. Storage at a per diem rate is charged against the goods after the lapse of this period. Goods not from the customhouse after two years are sold at auction. The storage is 2 cents per half kilo for the next month, and double this charge for each additional month or fraction thereof. It is customary for the consignee to pay these charges, but disputes often arise. There is no organized private storage business here.

Arrangements can be made for insurance while in warehouse, if desired. The rates range from $\frac{3}{4}$ to $1\frac{1}{2}$ per cent. The charges of both storage and insurance are borne by the goods. Goods never arrive in Honduras before the related documents. But in case of loss of documents they can be replaced.

All packages must be opened in the customhouse before delivery to the drawee, hence there is no difficulty about the drawee's examining the goods.

If bills of lading are made to the order of the consignee he may obtain the goods without producing the bills of lading, but this cannot be done if they are made "to order." To give the exporter absolute control of the goods the bills of lading should be made out "to order", indorsed in blank, and kept in blank with proper instructions.

A law of the National Congress of February 17, 1919, prohibits the importation of strong or light alcoholic liquors in barrels or other containers except bottles. Table wines are excepted from the list.

A decree of the National Congress dated March 28, prorogued the one which permitted the importation of carbide of calcium in solid or granulated form, carboline, and creoline free from government and city taxes for five years. The importation of "Garrapaticida" (Bug poison) and similar articles is permitted free by this decree.

With the object of increasing commerce between the United States and Honduras a steamship service has been established between New Orleans and the eastern section of the northern coast of Honduras.

The Cuyamel Fruit Co., has established a weekly maritime freight and passenger service between Puerto Cortes, Tela, Ceiba, and Trujillo. One of the vessels of this company leaves Puerto

Cortes on Tuesday of each week, visits the ports mentioned, and returns to the port of departure on the following Sunday.

NEW TRADE-MARK LAW.

A new trade-mark law was put into effect from August 1, 1919. Under the new law there is a registration fee of \$50 gold for each mark, but this increased fee will not apply to applications filed before that date.

According to the new law the following trade-marks cannot be registered in Honduras: Those identical or similar to others already registered, or whose principal characteristics are so pronounced as to cause confusion at first sight; coats of arms, emblems, or government, municipal, or public corporation seals, either domestic or foreign; generic and geographic names, or the names of persons or objects, except when accompanied by drawings or phrases describing same; the names of photographs of living persons, without their consent; all signs or words which may be contrary to morals or which ridicule corporations or persons in the opinion of the patent and trade-mark office or the Secretary of Fomento.

To obtain the exclusive right to the use of a trade-mark, the name of the petitioner must be stated in the request, as well as the name and place of manufacture or the headquarters of the business, together with a detailed description of the trade-mark, stating whether it has been registered or not in other countries, the class of the trade-mark, and the name of the products to which it applies. The registration of the trade-mark must be under the exclusive responsibility of the petitioner and without injury to third parties. The registration of a trade-mark requires the payment to the Government, once only, of a tax of 50 pesos silver, and is valid for 10 years.

On March 1, 1919, the President approved the bill authorizing the execution of the terms of the treaty for the protection of trade-marks signed at the Fourth International Pan-American Congress in Buenos Aires, August 20, 1910.

FINANCE.

In the fiscal year 1917-18 the new receipts reached 4,805,781 pesos, or 801,678 pesos less than in the year 1916-17. As the expenditures of 1917-18 amounted to 5,423,073 pesos, a deficit of 617,292 pesos remained, which was met by the 213,107 pesos which were available July 31, 1917, and 404,184 pesos which the Atlántida Bank left the Government for meeting obligations.

The general expense budget for the fiscal year 1918-19 was, 6,471,661 pesos. The principal estimated sources of the revenue in pesos were as follows: Imports, 2,200,000; exports, 370,000; tax on aguardiente, 1,500,000; tax on sealed paper and stamps, \$150,000; postal, telegraph, and cable receipts, 219,000; tax on land products, 125,000; national railways, 534,000; road tax, 430,000, and other revenues, 943,661. Total 6,471,661.

The general budget of Government receipts and expenditures for the year 1919-1920 estimates the receipts at 6,482,487 pesos,

and the expenditures at a like sum. The estimated expenditures in pesos are as follows: Department of Home Government, 841,929; Justice, 230,559; Foreign Relations, 256,823; Public Instruction, 600,895; Fomento, Public Works and Agriculture, 969,055; War and Marine, 1,997,920; Finance, 521,306; Public Credit, 100,000; National Railway, 534,000; and Public Highways, 430,000.

The Customhouse receipts at Ceiba during 1918 amounted to 1,700,000 pesos, and at Puerto Cortes, to 1,031,000 pesos.

DEBT.

The Republic of Honduras is shouldering a national debt far beyond its resources, interest on which is neither earned nor paid.

It is the result of the attempted construction of an "Inter-oceanic" railway from Puerto Cortés on the Caribbean Sea to Amapala Bay on the Pacific Coast. The scheme had its origin shortly after the discovery of gold in California, and at about the date of the construction of the Panama Railroad. It was largely the idea of Mr. E. G. Squire. He formed a company to carry out the enterprise, but met with great opposition on the part of the owners of the Panama Railroad. Finally in 1858 some survey work was done under the direction of Gen. William W. Wright, an American, the cost being approximately \$400,000. The length of the line as located was to have been about 250 miles. The outbreak of the Civil War in the United States, caused the collapse of the company.

In 1867 the Government of Honduras, following extended negotiations with contractors, gave a concession for the construction of the railway, issuing 1,000,000 10 per cent. bonds, which were offered publicly in England and on the Continent of Europe by Messrs. Bischoffsheim & Goldschmidt at 80 per cent. The Government agreed to provide an annuity of 140,000 during the years 1870 to 1884, inclusive, also promising the subscribers one-half of the railway profits for the years 1885 to 1899, inclusive.

Prior to the marketing of the above bond issue, the debt of the Republic was 90,000 representing a loan dated 1867, bearing annual interest at 5 per cent. These bonds had been issued largely to liquidate this Republic's share of the debt of the former Central American Federation dissolved in 1882, and certain floating obligations.

In 1869 Messrs. Dreyfus & Co., of Paris, sold for the account of Honduras 2,490,108 bonds, bearing interest at the rate of $6\frac{2}{3}$ per cent.

These bonds were publicly offered at 75 per cent., and were intended to provide funds for the construction of the railway. They were secured on the railway property and on the nation's forest domains.

The contractors prevailed upon Honduras authorities to issue another loan, this time for 2,500,000. The bonds were offered in London in 1870, at 80 per cent. and bore interest at 10 per cent. As an additional attraction it was agreed that the bonds would be paid off at par in 34 semiannual drawings. The

designated security for the loan was the railway, its revenues, and the produce of State Domain. Messrs. Bischoffshelm & Goldschmidt were the bankers, acting for the account of Mr. C. J. Leleuvre.

Early in the year 1873 the interest on the various loans, which until that time had been paid out of principal, was defaulted. A total of 57 miles of the line had been completed at a cost of probably not more than \$1,500,000. To cover the cost of the construction of this mileage a debt of 5,990,108 had been contracted. Sinking-fund operations had reduced the total to 5,398,570. No interest has since been paid on these bonds or on the 90,000 bonds of 1867.

The foreign debt, in January 1, 1919, was as follows, in Sterling pounds:

Five per Cent. Loan of 1867, £78,800; Coupons in arrear (April, 1873, to Oct., 1918), £181,240; Ten per Cent. Loan of 1867, £900,700; Coupons in arrear (Jan., 1873, to Jan., 1919), £4,188,255; Six and two-thirds per Cent. Loan of 1869, £2,176,570; Coupons in arrear (Sept., 1873, to Sept., 1918), £6,602,262; Ten per Cent. Loan of 1870, £2,242,500; Coupons in arrear (Jan., 1873, to Jan., 1919), £10,427,625; Total £26,797,952.

In March, 1909, an arrangement for the settlement of the External Debt was entered into between the President of Honduras and the British Minister in Central America, acting on behalf of the Bondholders; but before the proposals could be submitted to the Bondholders, the United States Government intervened, and insisted on the substitution of their own scheme of settlement. Under this scheme, Messrs. Morgan and Co. agreed to purchase the Bonds of the External Debt, on or before the 4th August, 1910, at the rate of 15 cash per 100 of Bonds with all arrears of interest, provided that an arrangement for the settlement of the Debt, satisfactory to themselves, was in the meantime entered into between the United States and Honduras. The Council, at Messrs. Morgan's request, invited the holders to deposit their Bonds, in assent to the agreement, against the issue of negotiable deposit receipts, and a large majority of the Bonds was promptly deposited. In July, 1910, Messrs. Morgan and Co. notified the Council that they were not prepared to pay the 15 cash, and at a General Meeting of the Certificate Holders on the 26th, of that month it was resolved to extend the time to the 4th February, 1911, provided compensation for the delay was given in such form or manner as the Council and Bondholders Committee might approve. In January, 1911, however, Messrs. Morgan and Co., again stated that they were not prepared to take up the Bonds. On 31st January, 1911, the proposals were rejected by the Honduras Congress. In February, 1912, Messrs. Morgan and Co., announced that they had withdrawn from the Loan Agreement.

BANKING.

There are three banks of issue in Honduras, the Banco de Honduras, Banco de Atlantida, and Banco de Comercio. The

first-named has its headquarters in Tegucigalpa, with a capital of 417,500 pesos and bank notes outstanding to the amount of 505,000 pesos. The Banco de Comercio is located at Tegucigalpa; its capital is 500,000 pesos and its note circulation 44,000 pesos. These banks may issue paper to the amount of 200 per cent. of their outstanding stock, subject to a silver reserve or deposit of 50 per cent. Banking laws are practically non-existent, the National Commercial Code governing banking operations. Mortgages and short-time loans normally carry interest at the rates of 10 to 12 per cent. and form a large part of the business of these banks.

The subscribed capital of the Atlántida Bank of La Ceiba, which until recently amounted to \$500,000 gold, with 50 per cent. paid, has been increased. Besides the headquarters in La Ceiba and the branch offices at San Pedro Sula, Puerto Cortés, and Tegucigalpa, the bank is to establish another branch in Amapala and various agencies at other points.

The Congress of Honduras authorized the President of the Republic to establish a Bank of Issue, deposit, and discount, to be known as the "Banco de la República de Honduras," with a capital of a million pesos silver, 50 per cent. of which is to be subscribed by the State and 50 per cent. to be raised from the sale of stock to the public.

The President issued a decree on September 13, 1919 providing that the banks of issue shall guarantee their bank notes by a reserve of American coins (gold or silver) at the rate of 2 to 1 in the same proportion as has been established in their charters. The bank notes are accepted and exchanged at this rate so long as the banks are able to import sufficient amounts of American coinage, and they were relieved from the obligation of actual redemption of bank notes for a period of six months from the date of the decree.

HOLIDAYS.

January 1, New Year's Day-January 6, Epiphany-February 2, Purification-March 25, Annunciation-April 1, Holy Thursday-April 2, Good Friday-April 3, Holy Saturday-May 13, Ascension Day-June 3, Corpus Christi-June 24, St. John the Baptist-July 14, Fall of the Bastille-September 15, Independence Day-October 3, Celebration of Francisco Morazán-October 12, Discovery of America-November 1, All Saints' Day-December 8, Immaculate Conception-December 25, Christmas day.

CREDIT METHODS.

Local exchange rates are based on the value of local coin in terms of the gold dollar. Foreign money is figured at American gold value, and then converted into local coin. New York quotations are only received by mail, and so have little effect on local transactions. Local banks do not keep posted on daily fluctuations of exchange rates. Dollar bills, drafts, etc., are converted into local currency on the basis of local supply and demand. Exchange tables are not published in this country, and

"forward" rates of New York discount are not quoted. There is practically no business done in the purchase of commercial bills, either American or foreign.

In the matter of imports to Honduras the banks charge a commission of $\frac{1}{2}$ per cent. for collecting clean or documentary items. The same charge is made for obtaining acceptance if the bill is not left for collection. There are no stamp charges of any kind of either clean or documentary items.

The amount charged in case of protest is about \$8 gold, and this is paid by the drawee. The American exporter is held responsible for collection and banking charges, except in case of difficult collection, when the importer pays.

Local banks will not usually guarantee payment of drafts, and it is not advisable to consign goods to them, because the fact becomes known and no one will then pay what the goods are worth.

Banks will accept parcels to be delivered to consignee against payment or acceptance of draft, if such parcels are shipped by mail. The charge in such instances is 1 per cent. Parcel sent by freight are not accepted for delivery.

To make possible a remittance of the full face or drafts, they should be made "Payable at the bank selling-rate for sight drafts, in New York, plus bank collection charges." It is not customary to have remittance cover collection charges or interest. If this is desired, however, an explanation of the proposed charge should be added to the above clause.

If a bill is drawn on a Honduras bank in other than the local currency it is customary for the drawee to make payment by draft purchased from another Honduras Bank. But neither law nor custom provides any rate of exchange when drafts are drawn in a foreign currency.

From 4 to 6 per cent. is generally allowed acceptors for retiring drafts before maturity. But this is not fixed by law. In addition to fees mentioned above, additional commission is allowed in case of protests. Payment of such charges is made to the New York correspondent of the Honduras bank or is deducted from the next remittance.

MONEY.

Honduras is on a silver basis, the money in use being the silver peso or dollar, of 100 cents, 25 grammes, '900 fine. The fractional silver money consists of 50, 25, 20, 10, and 5 cent pieces. The real, equivalent to $12\frac{1}{2}$ cents, is also in popular use. The monetary unit is the silver peso. In 1914 it was worth about 38 cents but after 1915 it went down considerably.

On January 24, 1919, the national Congress approved a Presidential decree by which American money and bank notes were declared legal currency.

COMMUNICATIONS.

There are six railways systems operating in the country, with a total 220 miles. One is the National Railway, owned by the Government and extending through the Department of Cortés;

of which San Pedro Sula is the capital. The other five are privately owned lines, and operate mainly through the banana and sugar lands of the north coast. Four of these systems are in the Department of Atlantida, of which La Ceiba is the capital, and the fifth passes through the Department of Colón, of which Trujillo is the capital.

The National Railway operates about 59.6 miles from Puerto Cortés to Pofrerillos.

The Vacarro Brothers operate 93.2 miles of private line; this line runs through the banana territory of Ceiba and extends beyond San Juan to Punta de Rieles. The United Fruit Company has 7.4 miles in the Tela region. The line of the Honduras Rubber Company, now the property of the Tropical Timber Company, has 7.1 miles; the Trujillo Railroad Company operates 25.2 miles from Trujillo to Juticalpa and beyond, a total distance of 16.4 miles, and a branch line to Rincon, 8.8 miles; and the Cuyamel Fruit Company operates an extension of 27.3 miles in the Cuyamel vicinity.

By an act of the Honduran Congress approved March 28, 1919, a change was authorized in the location of the unconstructed portion of the Vaccaro railroad which begins at Ceiba. The road has been constructed westward from this town approximately 47 miles. According to the terms of the original franchise the road was to extend southward from the terminus of the present constructed road to the city of Yoro, near the source of the Aguan River.

However, the company is now authorized to build the road over the old route or to start from any point on the constructed line, cross the mountains, and build southward to Yoro; or it may build from Ceiba eastward, cross the mountain range into the Aguan River valley in its lower regions, and follow the valley by way of Olanchito to Yoro.

In April 1919, the fourth section of the Trujillo Railway, between kilometers 46 and 66, was officially opened to public traffic. The line is being built by the Trujillo Railroad Co., which has already begun work on the fifth section.

The receipts of the National Railway in April 1919 aggregated 40,700 pesos and in May 40,100 pesos, amounts considerably in excess of those of previous months.

There are at the present time no street-railway systems in Honduras and no gas companies. Electric lights have been installed in Tegucigalpa, the capital, Cuyamel, Ceiba, and San Pedro Sula, and possibly in one or two of the smaller towns. Several additional lighting properties are projected. The electric light and power enterprise that operates in Tegucigalpa has three plants located at Centro, Leona, and Río Chiquito.

The foreign mail, handled in the 278 post offices in the Republic, amounts to about 700,000 pieces annually, and the domestic to 850,000 pieces. The Republic has parcel post conventions with Chile, the United States, Great Britain, France and Mexico.

There are about 4,900 miles of telegraph lines, with about 259 offices. The telephone companies operate about 432 miles of line and 301 stations in the capital and other towns.

A treaty concerning the interchange of postal money orders has been signed in San Salvador between the Republic of Honduras and Salvador. Orders will be made on the basis of United States gold according to the rate of exchange for the day, and the maximum that may be drawn on one order is \$40.

TEGUICIGALPA.

Mendoza y Agurcia, Minoñ 1 y 2; Máximo Amador M.; J. Esteban Banegas; Alberto Bernhard; Manuel Calderon; N. Cornelsen; Antonio Chan Wais y Co.; N. Facusse; Mercedes Vda. de Fiallos; Cornelio Fortin; D. Fortin; Juan E. Galindo; Próspero Hinestroza; S. Lainez; Ana L. de Lopez; A. Mansour; Alejandro Mayr; Abraham Napki; Joaquin Pon y Co.; L. K. Purdon; Quin Chon Leon y Co.; Rosa Vda. de Rosa; José Reyes Palma; José Segovia; Francisco Siercke; S. Soto y Co.; Juan Stradtman; R. Fernando Streber; P. Uhler y Co.; Miguel Vega; F. Werling; M. Zuñiga.

Shoes.

Juan Alvarado, La Estrella.

Druggists.

Alberto Bernhard, Alemania; Samuel Lainez, Alpha; El Condor, La Cruz Roja, Isidoro Martinez; Instituto Quimico, S. Lainez, José C. Reyes, Moderna; A. Eraso, Reunión; Agurcia y Mendoza, Unión; La Violeta, D Robles.

Booksellers.

I. Agurcia, Alemana, Ramon Landa, Santos Soto y Co., Atanacio Valle, M. Vigil M.

LA CEIBA.

Importers and exporters.

J. Andignon, P. Beesch, V. Brau, L. E. Castillo, J. Cueto, P. Devant y Co., E. P. Duto, M. Francisco, Gonzalez y Hnos., J. Hiri-goyen, J. W. Mallan, M. Mejia, E. Muentier, Blanco y Peralta, United Fruit and Co.

MEXICO.

The Mexican Republic is the fourth largest independent country of the New Continent and the second largest in North America. It is as large as the States of Montana, Wyoming, Colorado, New Mexico, Arizona, Utah and Nevada combined, and about as sparsely populated as they are.

Mexico is about three times as large as Austria-Hungary, and nearly four times as large as France, or equal in extent to Great Britain and Ireland, France, Germany, and Austria-Hungary combined.

The boundary line between Mexico and the United States was established by treaties in 1848 and 1853, and is now 1,833 miles in length, 1,136 of which are covered by the Rio Grande from its mouth in the Gulf of Mexico inland.

The following table shows the principal cities with their population according to the census of 1910 and altitude above the sea:

Cities	App. altitude in feet	Pop.	Cities	App. altitude in feet	Pop.
Aguascalientes	5,583	45,198	Monterrey	1,485	78,428
Campeche		17,109	Oaxaca	4,638	38,011
Tuxtla Gutierrez	1,590	10,239	Puebla	6,486	96,121
Chihuahua	4,548	39,706	Queretaro	5,820	33,152
Saltillo	4,881	35,414	San Luis Potosi	5,631	68,022
Colima	1,512	25,148	Cullacan	120	13,527
Durango	6,300	31,763	Hermosillo	615	14,578
Guanajuato	6,249	35,682	San Juan Bautista	81	12,327
Pachuca	7,338	39,000	Cludad Victoria	1,347	12,103
Guadalajara	4,698	119,468	Jalapa	4,215	24,810
Toluca	8,013	31,023	Merida	24	62,447
Morelia	5,850	40,042	Zacatecas	7,488	25,900
Cuernavaca	4,626	12,776	Mexico City	7,488	471,066
Nayarit	2,859	16,778			

No recent census has been taken. The revolutionary commotions through which Mexico has passed in recent years have no doubt affected the population. As the beginning of the revolution, a large number of people emigrated. Most of the emigrates, however, have returned. Estimates made by travelers and persons well acquainted with the country indicate that the official figures are very low. It is believed the population of Mexico at the present time is not far from twenty million.

The population of Mexico City, which in 1910 was 780,000 is estimated now at 1,080,000.

AREA AND POPULATION.

The area of Mexico is about 767,198 square miles including the islands. The population, according to the last census in 1910, was about fifteen and one half millions.

The following table gives the area in square kilometers of the states, territories and federal district, according to the division adopted by the new Constitution. It also gives the population according to said census and as officially estimated in 1912:

States and Territories	Area in sq. miles	Census Population 1910	Pop. per sq. mile, 1910
Aguascalientes	2,969	120,511	40.6
Baja California	58,338	52,272	0.8
Campeche	18,089	86,706	4.7
Chiapas	25,527	438,843	16.1
Chihuahua	90,036	405,265	4.6
Coahuila	63,786	362,092	5.7
Colima	2,272	77,704	34.2
Districto Federal	578	720,753	1556.8
Durango	42,272	436,147	12.8
Guanajuato	10,950	1,081,651	96.1
Guerrero	25,279	605,437	20.1
Hidalgo	8,637	646,551	74.7
Jalisco	33,492	1,208,855	37.9
Mexico	9,230	989,510	107.0
Michoacan	22,621	991,880	43.3
Morelos	1,895	179,594	60.4
Nayarit	10,953	171,173	15.1
Nuevo Leon	25,032	365,150	15.4
Oaxaca	35,689	1,040,398	29.3
Puebla	12,982	1,101,600	90.2
Queretaro	4,493	244,663	68.8
Quintana Roo	19,270	9,109	0.4
San Luis Potosi	24,004	627,800	24.7
Sinaloa	27,557	323,642	9.6
Sonora	76,633	265,383	3.4
Tabasco	10,374	187,574	18.6
Tamaulipas	30,831	249,641	7.7
Tlaxcala	1,534	184,171	115.4
Veracruz	27,860	1,124,368	38.7
Yucatan	15,939	339,613	9.6
Zacatecas	24,471	477,556	19.2
Islands	1,575		
Grand total	767,198	15,115,612	19.2

IMMIGRATION.

The department of Interior recently established the immigration service in the following ports of entry: Ciudad Juárez, Piedras Negras, Matamoros, Tijuana, Nuevo Laredo, Nogales, Veracruz, Tuxpam, Mexicali, Ojinaga, Palomas, Mier, Villa, Naco, Reynosa, Mariscal, Guadalupe, Colombia, Guerrero, Agua Prieta, Camargo, Sta. Cruz and la Noria.

Health officials act as immigration officials in all ports where no special service have been established.

Statistics relating to emigration and immigration from September 1918, to June, 1919, indicate a total of 47,978 emigrants, as against 60,068 immigrants, a showing of 12,050 in favor of an increase in population. The number of foreign immigrants was 13,077, of which 4,250 settled in the country.

During the period from September, 1918, to August, 1919, the number of naturalized foreigners was 70, and 55 certificates of Mexican nationality were issued. In accordance with article 33 of the constitution, during the year referred to there were deported from the country 67 foreigners of different nationalities.

The Mexican consul at San Francisco recently communicated to his Government the information that 80,000 Portuguese laborers skilled in vine culture and wine making, and who have been thrown out of employment by the new prohibition laws of the United States, wish to come to Mexico to continue the wine industry in this country. The Secretary of Agriculture and Fomento expressed great interest in the proposition, and instructions were sent to the consul to announce that the Mexican Government will extend the prospective immigrants any facilities which would be of assistance in establishing themselves in the Republic.

The Secretary of Agriculture and Industry has authorized the allotment of land and necessary materials to the first 300 English settlers who arrived at the port of Manzanillo with the object of founding a British Colony in the State of Colima.

CLIMATE.

Although most of the Mexican territory is within the tropical zone, there is a variety of climates on account of the mountainous character of the land. As a general rule, all sections of the country under three thousand feet above the sea level are considered hot and are called the hot lands. From 3,000 to 4,500 feet, the climate is temperate, and above 4,500 feet the climate is generally cold. Local conditions, however, such as the direction of the valleys and mountains, the winds, the proximity of the rivers, lakes and underground streams, the forest, as well as the rainfall, modify the climate to a certain extent. Thus in the valleys of the State of Morelos, at average altitude of 4,500 feet, within the limit of the temperate zone, the climate is torrid, while the surrounding mountains are covered with snow. On the other hand, the city of Oaxaca, at a much lower altitude, has a temperate climate. In the sections of the country which include the industrial centers, and the cultivated lands, the people are never subjected to extreme and unhealthy climate as they are in Alaska, Panama or the African colonies, but on the contrary, Americans and Europeans, accustomed to the extreme temperatures of the high latitudes, find the climate in Mexico extremely mild and pleasant.

The city of Guadalajara has one of the most pleasant climates in the World. The average annual temperature is 67.6 degrees Fahrenheit and for a period of six years, the absolute maximum was 96.9 F.; the absolute minimum, 40.1 F.; the average humidity, 49%; the absolute maximum humidity, 9%, and absolute minimum humidity, 12%.

Mexico is a land of sunshine. In the high elevations especially, the sky is clear most of the time. Mexico City, which is over 7,000 feet above the sea level, has a large proportion of sunshine, the average being about 2,482 hours of sunshine in the year, or about 56% of the total daylight hours.

From official data it can be said that in about 13.9% of the total area of Mexico the average annual rainfall is below 10 inches. In about 16.9%, the average annual rainfall is from 10 to 20 inches; in about 44.6%, it is from 20 to 40 inches; in about 21.9%, it averages from 40 to 80 inches, and in about 2.7% it exceeds 80 inches per year.

According to an authority, in the first section as given above, that is, when the rainfall is 10 inches per year, farming is impossible. The second section and part of the third are suitable for dry farming and wherever the rainfall is above 30 inches per year, agricultural enterprises are profitable. These facts are very important and should be had in mind by anyone wishing to invest in Mexican agricultural ventures.

HEALTH CONDITIONS.

The great diversity of climate in the Mexican Republic and its locations on and below the tropic, makes health conditions very dissimilar from one place to the other. As a general rule, health conditions are good along the Gulf Coast, and around the lakes in certain glossed plateaus. In a few spots along the Pacific, health conditions are poor as the land is flooded and marshes are formed, which makes them very unsanitary, especially in the summer months.

The progress made, however, in sanitation shows that location in the tropic and marshy condition of the soil are not, by themselves unsanitary. Good draining and the adoption of modern methods can turn lands, long considered uninhabitable, into healthy and pleasant resorts.

Not long ago yellow fever prevailed in the gulf coast, but is has been completely eradicated.

The official statistics show a high rate of mortality, especially in the large cities. Such figures should not alarm the foreign tourists visiting the country, as such statistics are not entirely correct and besides, the high mortality only affects the poor classes who are now being educated in sanitation, but who have no high standard of living.

GOVERNMENT.

The new constitution was promulgated with great solemnity on February 5, 1917, and became operative on May 1, 1917.

The new constitution, a summary for which can be found in the Latin-American Year Book for 1918 (pages 253, 254 and 266 to 277), follows the principles of the constitutions of the United States and of New Zealand and Australia. Its main differences as compared with the old constitution are: the independence of the Judicial Power, the division of large estates, the creation of small property and homestead, the autonomy of municipalities as the basis for the political organization of the States, the establishment of the basis on which Congress and the State legislatures may legislate on labor matters and labor contracts, and the recognition of the right of the workmen to strike and of the employers to the lockout.

The Mexican Senate has approved the convention regarding interchange of diplomatic pouches made between Chile and Mexico, May 16, 1919.

In April, 1920, the State of Sonora rebelled against President Venustiano Carranza, who had been elected for the term 1916-20, because the president attempted to invade the State with troops in order to interfere with the presidential election. On April 23, a revolutionary plan was adopted at Agua Prieta, Sonora, repudiating President Carranza, on the ground that he had interfered with freedom of election. The text of the plan adopted by the revolution is as follows:

Article 1. Venustiano Carranza ceases hereby in his capacity as chief executive of the Republic.

Article 2. All public officials whose authority has its origin in the last election in the States of Guanajuato, San Luis Potosi, Queretaro, Nuevo Leon, and Tamaulipas, are hereby repudiated.

Article 3. The members of the municipal council of the City of Mexico who were declared elected in consequence of the recent election are also hereby repudiated.

Article 4. José Santos Godínez is hereby recognized as Constitutional Governor of the State of Nayarit.

Article 5. Recognition is also granted hereby to all legitimate Federal and State authorities. The Liberal Constitutionalist Army will support said authorities, as long as they do not oppose or antagonize the present movement.

Article 6. The political Constitution of February 5, 1917, is hereby expressly recognized.

Article 7. The Liberal Constitutionalist Army shall be formed by all generals and officers who may support this program. The present Constitutional governor of Sonora, C. Adolfo de la Huerta, shall act temporarily as supreme head of the army, with all necessary power for the political, military, and administrative organization of this movement.

Article 8. The Constitutional governors of the States supporting and assisting this movement shall each appoint within thirty days after the date of the present program a representative, duly authorized, and said delegates, at a meeting to be held sixty days after the date of the present program, at such place as designated by the supreme chief *ad interim*, shall appoint, by a majority of votes, the permanent supreme chief of the Constitutional Army.

Article 9. If for any circumstances, originated by the campaign, the meeting provided for in Article 8 is not attended by the required majority, the present Constitutional governor, C. Adolfo de la Huerta, shall act thereafter as the permanent head of the Liberal Constitutional Army.

Article 10. As soon as the present program is adopted by the majority of the country, and the City of Mexico is occupied by the Liberal Constitutionalist Army, a provisional president of the Republic shall be designated in the manner provided below.

Article 11. Should the present movement be accomplished before the end of the present congressional term, the Supreme Chief of the Liberal Constitutionalist Army shall call an extraor-

dinary session of Congress, at the best available place, and the members of Congress shall elect the provisional president in conformity with the Constitution.

Article 12. Should the case referred to in Article 11 occur after the end of the present congressional term, the supreme chief of the Liberal Constitutionalist Army shall assume the office of provisional president of the Republic.

Article 13. The provisional president shall call the election of legislative and executive powers of the Republic immediately after he assumes office.

Article 14. The supreme chief of the Liberal Constitutionalist Army shall appoint provisional governors for the States of Guanajuato, San Luis Potosí, Querétaro, Nuevo Leon, and Tamaulipas, and of any other State whose governor may oppose or repudiate this movement.

Article 15. After the triumph of this program is consolidated, the provisional president shall give the provisional governors the authority to call immediately a local election in accordance with the respective statutes.

Article 16. The Liberal Constitutionalist Army shall be governed by the military laws and regulations now in force in the Republic.

Article 17. The supreme chief of the Liberal Constitutionalist Army and all military and civil authorities supporting this program shall grant both Mexicans and foreigners full guarantees, and shall protect especially commerce and business in general.

The revolution swept the whole country so rapidly that President Carranza was compelled to abandon the City of Mexico on May 7, and on the next day revolutionary forces occupied the city.

An extraordinary session of Congress was called in accordance with the revolutionary plan, and governor Adolfo De la Huerta, of Sonora, was elected provisional president. The presidential election was called for September, and general Alvaro Obregón resumed his election campaign with every chance in his favor of being elected.

Provisional president De la Huerta organized his cabinet as follows:

Secretary of Foreign Affairs, Miguel Cobarruvias, lawyer, expert in international affairs.

Secretary of Interior, L. Martínez Alomía, lawyer, former member of the Judiciary.

Secretary of Finance, General Salvador Alvarado, former governor of Yucatán.

Secretary of War and Navy, General Plutarco Elías Calles

Secretary of Agriculture and Promotion, General Antonio Villarreal.

Secretary of Commerce and Industries, General Jacinto Treviño.

Secretary of Communications, Pascual Ortiz Rubio, engineer, former governor of Michoacán.

The organization of the new government has created very good impression in Mexico as well as in the United States.

MINERAL RESOURCES.

Even before the Spanish conquest Mexico was a great mining country, and at the beginning of 1800 the value of metals extracted was about \$25,000,000.

GOLD.

Gold production which is now about \$32,500,000 per annum, was \$54,500,020 in 1911, but is again steadily increasing in Mexico because of new mines and the installation of the cyanide process in more mines.

Gold is found in Chihuahua, Lower California, in the continuation of the California gold belt, in Oaxaca, Sinaloa and Sonora. The veins of Lower California are found in granite and sometimes the gold is in quartz, along with copper sulphide, also as auriferous pyrite, and also as free gold.

Very few placers are worked in Mexico. The most profitable mines work gold-bearing quartz veins, but gold is also found in great quantities in silver and copper mines, inasmuch as silver is found mixed with gold and copper or lead.

SILVER.

Mexico has second place as producer of silver in the world. Silver is mostly found in Chihuahua, Guanajuato, Guerrero, Hidalgo, San Luis Potosi, Sinaloa, and Zacatecas, but practically every state shows some silver. The greatest production is from low-grade ores containing as high as 32 ounces troy per ton and as low as 13 ounces. Generally gold is found with the silver in proportion of one of gold to 15 of silver.

Silver ore is mostly easily worked when found as "caliches," a soft material like chalky white limestone, very rich in silver. When found with lead, the ore is called "plomosos" which is very soft. If united with iron, the ore is called "bronces," and if with copper, "plata verde." The rarest and best ore is called "plata blanca."

The general method of working a mine in Mexico is the same as in the United States and the following may be taken as a typical example. In one well-known mine, having a surface area of 400 pertenencias, a pertenencia being a claim of 100 meters long by 100 meters wide, a production of 33,000 tons of ore per month is maintained, each ton containing 20 pesos worth of gold and silver. The total number of men employed is 2,800, of whom 1,900 are under ground, and the cost of mining, crushing and reducing the ore to bullion is about 11 pesos per ton.

As the Nation owns the sub-surface rights, the government collects a royalty of 13 per cent. on the bullion at values fixed from week to week by the government; so that this adds 2.60 pesos to the cost, leaving 6.40 pesos per ton profit at the mine. The workmen on a piecework basis earn as much as 5 pesos per day after paying for dynamite. The lowest pay is 1.25 pesos per day of eight hours. In heading 6 feet by 7 feet, the piecework rate is 60 pesos per meter forward in very hard ground and as low as 5 pesos in easy ground. For stopping, the piecework

rate varies from 3.50 pesos to 1 peso per carload of one and a quarter tons. The vein is about 8 to 24 meters wide and lies at an angle of 72 degrees to the horizontal. Most of the ground requires timber, as the quartz vein is imbedded in shale, the timbering being placed in square settings, three feet apart in the headings.

Zero level on which is the main heading, is 120 meters beneath the surface of the hill and there are galleries every 30 meters above and below this main heading, the greatest depth below zero level being 450 meters. The ore mined above zero is dumped through chutes to the cars on the zero tracks, and the ore below zero is hoisted to that level and all is run out to daylight and dumped to the crusher bins, where gyratory crushers, followed by stamps, reduce it to powder. The powder is treated with cyanide, which dissolves the gold and silver from the quartz, and this liquid, on passing over zinc shavings, converts the cyanide salts of silver and gold into a fine precipitate which is dried and fused with borax and cast into bars of silver bullion containing one-sixteenth part of gold. A new process is said to have been discovered which is cheaper and yields a larger percentage.

COPPER.

Copper is found in large quantities in Mexico, mostly in Lower California and the islands of San José and Carmen. The famous mines of Cananea in Sonora cover 5,000 pertenencias. The vein out-crops are most noticeable here, and large masses of native copper and oxide and carbonate ores are found. A vein of 30 feet width, underneath a bed of white marble consists of impure limestone, impregnated with zinc blende and chalcopyrite.

LEAD.

Lead occurs in Chihuahua, Coahuila and Durango. The product from the northeast is smelted in Monterey and is shipped to the United States as bullion for refining. The bulk of the lead comes from the plateau country, the chief camps being Almoloya, Naica, Santa Eulalia, Sierra Mojada and Saltillo. It is found as galena or sulphite and is generally in conjunction with silver.

Tin has been found in Aguas Calientes, Coahuila, Durango, Guanajuato, Jalisco, San Luis Potosi and Guerrero.

Mexican zinc ore contains a good proportion of calamines or carbonate sulphide which is required in the smelters of America in conjunction with the ores found there, and it is also found in the form of silicates. Chihuahua and Sinaloa are the principal centers for zinc mines.

IRON.

Iron ore is found in large deposits throughout the country. At Durango is situated the famous iron mountain containing 600,000,000 tons of ore 60 to 70 per cent. pure iron. Deposits

in northern Coahuila are convenient for supplying the steel works and foundries of Monterey; Sonora and Lower California have also large deposits.

Antimony is found in ores giving from 25 per cent. to 70 per cent. pure antimony, in many states. There is a large smelter at San Luis Potosi of 3,000 tons capacity per annum, employing 150 men. Considerable quantities of antimony are found also in Queretaro, and at Fresnillo in Zacatecas, there are deposits in veins 50 centimeters to two meters thick.

Quicksilver was used in gold and silver mines in the patio process to such an extent that large quantities had to be imported to Mexico, but, since the introduction of the cyanide process, there is not such a great demand for this metal. It is found in cinnabar or mercuric sulphide and also disseminated through rhyolite. San Luis Potosi has the richest mines, containing about 10 per cent. of quicksilver and it is also found in Durango, Guerrero, Jalisco, and Queretaro.

Manganese, which is mostly exported, is found in the State of Mexico in one deposit containing 44 per cent. of manganese. It is also found in Durango, Guerrero, Hidalgo, Lower California, Puebla, and Zacatecas.

In 1918 Mexico imported from the United States only 162,000 tons of coal and 284,000 tons of coke, as, since the discovery of petroleum, fuel oil is being used more and more in place of coal, and the large water power developed in Mexico has also reduced the coal requirements. Coal is found in the states of Coahuila and Sonora.

A large deposit of graphite is being worked in the State of Sonora.

Bismuth of a very good quality is found in Chihuahua, Durango, Guanajuato, Sinaloa, Sonora, Queretaro, and Zacatecas. Molybdenum has been found in Sonora, and selenium has also been found; cobalt and nickel are also reported. Vanadium was discovered in lead-bearing mines in Hidalgo many years ago, and it also is found in Chihuahua, Guerrero, San Luis Potosi, and Zacatecas.

Sulphur is very plentifully found in large deposits on Mt. Popocatepetl. The deposits in San Luis Potosi to the south of Venado and also near Guadalcázar are being worked successfully, and Durango has a large mine near Mapimi in the Sierra Banderas, which exceeds the output of the San Luis Potosi mines. There are deposits near Viesca still undeveloped.

TAXES.

Mining is carried on in Mexico under government ownership on the basis of royalties and in addition a national tax is paid on the land. There is no limit to the area a mining company may denounce as a mining claim, but, as the rate of taxation is progressive, this mining tax acts as a deterrent to companies holding very large areas without working them, and thus allows others to exploit them. The scale of taxation is as follows: 1 up to 5 pertenencias at 6 pesos, per pertenencia per annum; 6 up to 50 pertenencias at 7 pesos; 51 up to 100 pertenencias at 12

pesos; 101 up pertenencias at 18 pesos. A pertenencia is $2\frac{1}{2}$ acres. The royalties are 10 per cent. ad valorem on gold and silver, and 5 per cent. on copper and other metals; the value being fixed by the government from time to time.

ONYX.

The principal onyx fields of the Isthmus of Tehuantepec are located in the mountainous upper portion of the Tehuantepec River Valley and along the Toquisixtlan, a tributary of that stream. Several valuable fields are known to exist in that locality, and it is very probable that much more will be brought to light when the district is thoroughly explored.

The main field thus far developed lies four miles above Toquisixtlan on the river of that name. Onyx is known to exist here over an area of some 1,000 acres, lying close to the surface, so as to require but little stripping. This onyx is much superior to that of Lower California, bringing \$7.50 per cubic foot delivered on shipboard at Boston, Mass.; while the Lower California article brings but \$5.00.

These quarries are located at a distance of 35 miles from Tehuantepec, the nearest railway station. There are lesser fields 12 miles farther up the Toquisixtlan River, also at Toquisixtlan town and at a point on the Tehuantepec River 23 miles from Tehuantepec.

The principal field has been worked for a considerable period. In the four or five years immediately preceding 1910 some 30,000 cubic feet of onyx was quarried and exported to the United States. An onyx mine, yielding a product said to be even superior in quality to that obtained from the famous mines in the State of Puebla, has been discovered in the vicinity of Tampico.

OTHER MINERAL PRODUCTS.

Under contract dated December 6, 1918, a concession has been granted by the Mexican Government for the exploitation of the guano deposits on the islands, Isabela and San Juanico, in the Pacific Ocean, to General Lucio Blanco. The contract was made for a term of five years, with the option of renewal for an additional five years, and provides for the removal of a minimum of 2,000 tons of guano yearly, the concessionnaire to pay to the Government the sum of 1.50 pesos per metric ton for the privilege.

Extensive discoveries of guano are reported from Sonora as having been made by miners prospecting in the Sierra Madre. Large caves have been found in which this valuable substance has been accumulating for centuries, and many thousands of tons are available for shipment.

Reports from Pachuca say very rich veins of platinum have been discovered in the vicinity.

Inquiries made by the authorities of the State of Chihuahua under directions received from the Governor have disclosed the fact that there are large and rich deposits of kaolin in many places in the State of Chihuahua, among them Guerrero, San

Pedro de los Conchos (near Ortiz Station), Temosachic, and the region south of Ciudad Juarez. In these district the natives for a long time have been manufacturing chinaware for local use.

In a report made by the engineer Trinidad Paredes, to the Secretary of Industry and Commerce, it is estimated from the outcroppings of iron in Mexico that the deposits will yield 242,978,000 tons of mineral as a minimum, and its exploitation is urged as a paramount need of the country.

MINERAL PRODUCTION.

The following table shows the production of gold and silver in the last twelve years:

Year	Gold, Kilos	Kilos of pure silver.
1908	83,601	2,291,260
1909	35,875	2,299,920
1910	37,482	2,219,975
1911	37,436	2,458,241
1912	36,864	2,321,626
1913	28,969	2,199,186
1914	8,635	810,647
1915	7,358	712,599
1916	11,748	926,142
1917	23,543	1,306,988
1918	25,313	1,944,542
1919 (six months)	11,513	954,331

During the first nine months of 1919, 185,064,982 pesos worth of metals were produced in Mexico, distributed, according to the department of mines, as follows: Silver, 65,654,571; gold, 3,244,781; lead, 23,800,689; copper, 66,096,344; zinc, 9,036,233; antimony, 2,471,147; tin, 24,638; mercury, 785,297; tungsten, 787,274; graphite, 668,590; manganese, 459,321; and molybdenum, 36,038 pesos.

During the year 1918 the secretaryship of commerce and industry granted 3,912 mining claims, of which 3,736 are in operation.

The production of Lead, in kilos was in 1915, 6,703,206; in 1916, 19,970,986; in 1917, 64,124,752; in 1918, 98,837,154.

The production of copper in 1915 was, 205,978 kilos; in 1916, 28,411,248; in 1917, 50,985,523; in 1918, 70,223,654.

The production of tin, in 1916 was, 292 kilos; in 1917, 9,214; in 1918, 13,537.

The production of zinc, in 1915 was, 5,806,028 kilos; in 1916, 37,449,226; in 1917, 14,757,333; in 1918, 20,698,995.

The production of Tungsten in 1916 was, 12,250; in 1917, 187,637; in 1918, 149,486.

The production of graphite, in 1916 was, 470,343; in 1917, 430,046; in 1918, 6,190,849.

The production of Molybdenum in 1918 was, 27,371.

The production of Mercury, in 1917 was, 33,132; in 1918, 163,598.

The production of Manganese, in 1917 was, 73,387; in 1918, 2,878,383.

The production of Arsenic, in 1917 was, 1,284,820; in 1918, 1,881,011.

The production of Antimony, in 1916 was, 828,767; in 1917, 2,646,544; in 1918, 3,268,546.

All these figures express kilos.

According to official statistics, from the year 1910 to 1919, 10,000 mines have been denounced in the Republic.

During 1919, 3,466 mines were recorded, covering a surface of 89,405 hectareas, and 764 applications were favorable acted upon and the respective titles issued. There were also issued 64 permits to prospectors, and 96 for preliminary work on mines on which title had not yet been secured, while proceedings were begun to declare void 695 titles. There are now 3,736 mines which are being worked, an increase of 3 per cent. over those in operation last year; but the increase in the profits on metals and minerals has advanced 20 per cent., silver and copper being in the lead. The value of the mining production was about 305,000,000 pesos.

During the year 1918-19 six temporary permits were issued for the exploitation of salt mines, two for the exploitation of nitrates and five for guano.

A corporation has been organized in the city of Los Angeles, Calif., composed of Mexican and American capitalists, for the exploitation of the Cerro del Mercado iron mines in the State of Durango.

In the annual report of the Greene-Cananea Copper Company and its subsidiaries for the year ended December 31 1918, it is shown that the total revenue was \$10,801,765, compared with \$9,392,639 in 1917. After depreciation and dividends there was a deficit of \$565,380, contrasted with \$1,456,327 in the previous year.

During 1918 the company mined 1,169,998 tons of ore, of which 306,964 tons were concentrated copper ore, 855,862 tons direct smelting copper ore, 3,113 tons lead ore and 4,059 tons of zinc ore. The company made 52,694,731 pounds of copper from bullion produced by the company ores and 654,912 pounds from custom ores and concentrates, a total of 53,349,643 pounds. Silver production amounted to 1,692,000 ounces, of which 1,666,993 ounces came from company ores, and 31,016 ounces from custom ores and concentrates. The output of gold was 14,741 ounces, of which 9,846 ounces came from company ores, and 4,859 ounces from custom ores and concentrates.

The principal companies engaged in the mining industry in Mexico are:

Exploration Company, Ltd. Registered in London in 1904. Capital, \$3,750,000 American money. Office, 24 Lombard St., London, E. C. Owns stock of the Exploration Co. of England and Mexico; Buena Tierra Mining Co., etc.

American Metals Co., Ltd. Incorporated in New York in 1887. Controls the Compañía Minera de Peñoles of Mapimi, and Lanyon Starr Smelting Co., of Mexico.

Avino Mines, Ltd. Registered in London in 1909. Owns Silver, Lead and Copper mines. Capital, authorized, \$250,000; issued, \$93,750.

Compañía de Real del Monte y Pachuca. Owns gold and silver mining claims and over 30,000 acres of agricultural lands. Controlled by the United States Smelting Refining and Mining Co.

Compañía Metalurgica Mexicana. Incorporated in New Jersey in 1890. Capital, \$4,000,000. Owns smelting works at San Luis

Potosi; silver and lead properties at Sierra Mojada, Coahuila; controls the Alvarez Land and Timber Co., the Potosi and Rio Verde Railway Co., the Sombrerete Mining Co., and others. Office, 82 Beaver St., New York.

Giroux Consolidated Mines Co. Incorporated in Delaware in 1903. Owns copper mines in the State of Sonora. Controlled by the Consolidated Copper Mines Co.

Mexican Exploration and Mining Co. Controlled by the Pacific Smelting and Mining Co.

Mexican Gold and Silver Recovery Co., Ltd. Registered in London in 1899. Office, 65 London Wall, London, E. C. Capital, authorized, \$5,000,000; issued, \$2,500,000. Owns 200,000 acres of timber land and four iron-ore deposits.

Mexican Land Co. Incorporated in New Jersey in 1899. Capital, \$1,250,000. Controlled by the Compañia Metalurgica Mexicana.

Montezuma Lead Co. Incorporated in New Jersey in 1899. Capital, authorized, \$500,000 preferred and \$2,500,000 common. Controlled by the Compañia Metalurgica Mexicana.

Pacific Smelting and Mining Co. Incorporated in Maine in 1909, consolidating the Douglass Copper Co. and the Mexican Exploration and Mining Co. Also acquired 90 per cent. of the capital of the Mexican-American Smelting and Refining Co.

Salinas of Mexico, Ltd. Registered in London in 1906. Office, 9 New Broad St., London, E. C. Capital, authorized, \$1,625,000; issued, \$1,406,285. Owns salt producing properties.

San Antonio Copper Co. Incorporated in Arizona in 1908. Capital, \$2,500,000.

San Quintin Milling Co., Ltd. Registered in London in 1893. Office, 10 Copthall Avenue, London, E. C. Capital \$100,000. Owns flour and other mills at S. Quintin, Lower California.

Santa Gertrudis Co., Ltd. Incorporated in 1909. Capital, \$7,500,000. Owns 600 acres gold and silver mines at Pachuca, Mexico. Controlled by Camp Bird, Ltd., of London.

San Toy Mining Co. Incorporated in Maine in 1901. Capital, \$7,000,000. Owns silver, lead and iron properties.

Teztlutlan Copper Mining and Smelting Co. Office, 82 Beaver St., New York. Capital, \$10,000,000. Owns ten miles of railroad and 17,400 acres of land in Puebla and Oaxaca.

Compañia Minera "El Profeta y Anexas," Incorporated in Mexico in 1910. Capital, \$300,000 (Mex.) in \$50 shares. Owns the mines "El Profeta", "El Proyecto", "Los Angeles", "Ampliación" de la Reina, "La Reina", "El Dante" and "Nuevo San Carlos", with a total area of over 200 acres.

Compañia Minera y Fundidora de Zimapan. Incorporated in Mexico in 1912. Capital, \$430,000 (Mex.), in \$100 shares.

PETROLEUM.

The discovery of petroleum in Mexico on a large scale is comparatively recent, as it was not until 1901 that oil was found in the State of San Luis Potosi, near de Veracruz border, and while the production is now at the rate of 78,000,000 barrels a year, it was only 1,000,000 barrels in 1907. For complete details of the history of oil development in Mexico, see Latin-American Year-Book for 1919 (pages 363 to 374).

There are about 1,200 oil wells in Mexico, of which about 300 are producing, and the estimated capacity of these 300 wells is about 500,000,000 barrels per annum as against over 200,000 oil wells in the United States, with an estimated capacity of 300,000,000 barrels per annum, so that the Mexican field, which is only in its infancy, has a greater potential output apparently than the oil fields in the United States, which have been developed for many years.

The total area of the fields is given as 1,969,750 acres. The

production and exports for the last five years were as follows, the years ending in July:

	Production Barrels	Exports Barrels
1915	32,910,508	24,279,325
1916	40,545,712	26,746,432
1917	55,292,770	42,545,843
1918	63,828,326	51,768,010
1919	78,000,000	61,898,697

The Mexican oil fields center about Tampico, on the border of the states of Tamaulipas and Veracruz, which is called the Panuco district, the town being on the north side of the Panuco river. The Tuxpam district, 100 miles south of Tampico, is also quite a center, but at the port of Tuxpam the tankers have to lie out, in the roadstead and moor by laying out four anchors so that they are steady enough to take the oil on board from floating pipe lines attached by universal joints to submerged pipes in the bay. The captains of these vessels have become so expert that this method of loading, which at first was looked on as a dangerous expedient, is now used by all the oil companies at this port, and there are now 10 of these floating pipe lines in operation.

Oil is also found in Tabasco and Chiapas and on the Isthmus of Tehuantepec, in Lower California, and the government is now prospecting and is said to have found oil all the way across to the Pacific slope, where a Japanese company has been granted the right of drilling. A large deposit of paraffin has been discovered in Chihuahua, near the American border.

POSSIBLE SUB-GULF DEPOSIT.

The possibilities of finding oil under the Gulf of Mexico are now being discussed, and it is estimated by an oil expert that the sub-aqueous field would be 185,000 square kilometers, of which 55,000 would be off the Mexican shore and belong to Mexico, while 130,000 kilometers would be off the Texas shore and belong to the United States.

SECOND PRODUCER IN WORLD.

Mexico is now the second producer of oil in the world. The United States stands first with 350,000,000 barrels per annum. Russia's output before the war was 65,000,000 barrels, which has now been exceeded by Mexico. The average Mexican fuel oil contains, when properly mixed for use, about 10,500 calories per gram, as against 7,500 calories per gram of good steaming coal, so that about four barrels of oil is the equivalent of one ton of 2,000 pounds of ordinary bituminous coal.

Tampico before 1914 was a city of 26,000 inhabitants, but has now reached 85,000, and is a modern city, with asphalt paved streets, fine buildings, and electric lights. This is almost entirely due to the oil industry, as there is no great industrial development otherwise. The Panuco River is being dredged for deep draft vessels, and, as the future growth of Tampico depends on

the development of harbor facilities, the work is important, as is also the construction of railways connecting with the interior and north and south along the coast, and the short line to Mexico which has been surveyed. Piers and wharves are already built, and storage and handling facilities are in place, as well as custom house service. The Tampico-Panuco Railroad, about 30 miles long, is owned by Dutch interests, and they contemplate extending it to El Higo, another 20 miles, running through a rich agricultural section in which some oil fields are located.

The telephone concession is in the hands of a Mexican company.

In 1918 the production of petroleum amounted to 10,147,588 cubic meters, or 63,828,426 barrels. It should be borne in mind that the production represents only 10 per cent. of what could be obtained from the 310 producing wells which have been bored and the potential product of which is nearly 300,000 cubic meters, or 1,800,000 barrels, daily. During the time in question 31 permits for boring wells were issued, 16 of them having already been worked, with a production of 47,470 cubic meters, or 298,591 barrels, daily. The piping system for petroleum increased in 1918 by 73 kilometers, making the extension of the system 1,245 kilometers, by January, 1919.

Fifteen permits were issued in 1918 for the construction of tanks for the storage of petroleum. 25 steel tanks had been erected, with a total capacity of 7,674,000 cubic meters, or about 48,000,000 barrels.

According to information furnished by the Secretary of Industry and Commerce, the potential production of the oil wells in Mexico in August, 1919, was 253,201.93 cubic meters daily, or the equivalent of 1,592,649.14 barrels. The actual production on the other hand was 27,801,610 cubic meters, or 174,872,120 barrels equal to 10.98 per cent. of the potential output.

The total number of wells was in 1919, 1,056, as follows:

Wells located, 131; wells being driven, 114; wells in production, 298; wells not profitable, 27; well exhausted, 64; wells not producing, 422. Total, 1,056.

The largest number of productive wells belong to the following companies:

Aguila Company (Lord Crowdray), 55; Mexican Petroleum Co., of California, 33; The Corona Company, 10; Union Petroleum Co. Hispano-Americana, 17; The Texas Company of Mexico, 10; Mexican Gulf Oil Company, 8; Chicoles Oil Company (Ltd), 7; Mexican Combustible Company, 9; Penn. Mex. Fuel Oil Company, 7; Freeport & Mexican Fuel Oil Company, 12; Oil Fields of Mexico, 12.

The Aguila Company was drilling 18 wells, the Huasteca Company 11, while forty-two companies were sinking one well each, ten are sinking three each, three were sinking four each and one was sinking five.

The Huasteca Company was the leader in potential production, with 48,553.70 cubic meters daily; the Mexican Gulf Company came next with 22,370.50; the Aguila Company was third, with 20,590.18; the Tepetate Petroleum Company fourth, with 21,462.86, and the Transcontinental fifth, with 15,804.04 cubic meters.

PRODUCTION IN 1919.

Mexico's production of crude petroleum in 1919, according to the preliminary figures, amounted to 80,557,229 bbls., compared with 63,828,327 bbls. in 1918, 55,292,770 bbls. in 1917 and 39,817,402 bbls. in 1916. This represents an increase of 16,728,902 bbls. over 1918, or 26.21 per cent.

Exports of crude petroleum and refinery product from Mexico in 1919 amounted to 11,126,509 metric tons—79,999,599,71 bbls.—valued at \$186,445,975 Mexican gold; compared with 7,677,278 metric tons—55,199,628.82 bbls.—valued at \$140,557,553 in 1918, and 6,426,036 tons—44,203,198.84 tons—valued at \$53,676,127 in 1917.

An estimate has recently been made by the Technical Bureau of the Petroleum Department of the total amount invested in the oil industry in Mexico, including pipe lines, machinery, tanks, buildings, refineries, vessels, etc. The total is nearly six hundred millions Mexican gold, equivalent to three hundred millions in American gold, and the detailed estimate is as follows:

Wells in exploitation with a capacity of 1,500,000 barrels daily	\$300,000,000
1,200 kilometers (780 miles) pipelines	50,000,000
Tanks with capacity of 26,000,000 barrels	60,000,000
Refineries	55,000,000
Lands	50,000,000
Railway lines, buildings and machinery	30,000,000
Vessels for transportation, of which the Aguila Company owns one-third part, with a capacity of 250,000 tons ..	50,000,000
Total	\$595,000,000

Within the past few months there has been a great stimulation in investments in the oil regions and several very large foreign companies have acquired lands and are proceeding with their development.

The Secretary of Industry and Commerce has granted permission to the Mexican Gulf Oil Company to build a pipeline from Boca de Cajeta, in the municipality of Panuco, to the refinery of the Pierce Oil Company at Arbol Grande, near the city of Tampico.

Important discoveries of petroleum have been made in the State of Coahuila, and it is believed the oil belt extends entirely across Northern Mexico, connecting the deposits in Texas and those in Tamaulipas, San Luis Potosi and Vera Cruz. This oil is said to have a paraffine base instead of asphaltum, and to be of high quality. The Government of the State of Coahuila, is actively interesting himself in the developing of the new measures, as also in taking proper precautions that the new fields do not fall into the hands of monopolists in vast areas as has been the case elsewhere.

Under the auspices of the Geological Society of Mexico, a Free Petroleum School has been established, with headquarters in Tampico, that being the center of the oil industry. An initial appropriation of \$500,000 has been made and the projectors are enthusiastic in carrying out their plans. It is considered essential,

since the petroleum measures of the Republic are among its most valuable possessions, that native students should be given an opportunity to learn whatever technical and practical instruction can impart in this direction. There promises to be a large attendance at the school.

A petroleum expert has invented a new style of pipe for transporting oil for which many advantages are claimed. It is made of many strips of paper, chemically treated, and wound on a mandril in spiral form, with re-enforcement of wire. It is otherwise prepared to withstand usage and it is claimed that it is superior in every way to the present system, while costing less.

Extensive oil fields are said to have been discovered in the Altata district, State of Sinaloa, particularly on islands on the Pacific coast in that district.

The government has done everything possible in order to establish in the country the greatest possible number of petroleum refineries, as it maintains that the refining of this product is the most important part of the petroleum industry. At present there are only four refineries, but work will soon begin in the refineries which are now being installed by the Texas Co. of Mexico and the Atlantic Refining Co. The total capacity of the refineries so far established amounts to 14,300 square meters, or 90,000 barrels daily, and 22 per cent. of the total of the exported petroleum is represented by the refined article.

Rich deposits of petroleum have been found in the State of Coahuila. Investigations already made by geologists show that the northern part of the State contains petroleum wells that compare favorably with the deposits found in the northern part of the State of Veracruz. Several companies have been organized to explore them. The preliminary work will begin at once in the vicinity of Piedras Negras. Geologists assert that the deposits of Coahuila are a continuation of those which are found in Texas.

The National Government is to establish a modern laboratory equipped with all the necessary appliances for the analysis of oil exported through Tampico, to grade the oil, and determine export duties.

Two petroleum companies with a capital of £7,000,000 have been organized in Glasgow, to operate in Mexico.

Two American prospectors have solicited permission from the Government to make explorations in the northern part of the State of Chihuahua, where they believe that large deposits of petroleum exist. They base their belief on the grounds that important oil deposits lie immediately across the River Bravo in the State of Texas, from which a considerable yield has been obtained. These deposits are in the same geological zone.

A combination of several of the leading Atlantic coast steamship lines has acquired possession of an extensive area of petroleum lands in the Tampico district, which they will proceed to develop upon a large scale for the purpose of supplying fuel for their vessels. Among the number are the Atlantic, Gulf and West Indies Steamship Line, the New York and Porto Rico Line, the Mallory and Clyde lines, as well as other smaller ones. A company has been organized under the name of the Atlantic Gulf

Oil Corporation and with a capital of twenty million dollars. One of the features of the organization is the construction or acquisition of a fleet of tank steamers capable of shipping ten million barrels of oil annually to all portions of the world. Active construction work will, it is said, be commenced immediately.

The operations of prospectors in the neighborhood of Mapimi, in the State of Durango, have led conclusively to the belief in Government circles that there exist large and important oil deposits in that vicinity. Already on the basis of these explorations several claims have been filed in the Department of Petroleum of the Ministry of Industry, Commerce and Labor, and the concessions have been granted. Further concessions for new wells will not be granted in regions where petroleum is now produced, pending enactment of the proposed petroleum laws which are now being considered by the National Congress.

This new oil region is adjacent to the important mining section of Velardeña and Pedriceña, within easy reach of Parral and Torreon, and there is good railway connection with Monterrey and the industrial region thereabouts.

The representative of the Yokohama Steamship Company is investigating sources of fuel supply in connection with the recent petroleum discoveries on the west coast, as it is desired to replace coal and coke with oil not only for ocean traffic but for various industries in Japan. It is probable that concessions will be asked for the development on the coast of the States of Sonora and Sinaloa. The question of mines is also being examined, with the purpose of investing therein.

An oil deal unprecedented in the history of the industry in the country was recently made between several oil companies of Mexico and an American corporation, Harper and Co., by which the latter agreed to purchase 50,000,000 barrels of oil from the Mexican companies, to be mined from wells which have not been in operation for some time. The oil will, in turn, be supplied to the railways of the northern part of the United States, with whom the company has entered into contracts.

Rentals paid by Oil Companies.

The Secretary of Industry and Commerce has compiled statistics of the various companies operating in the petroleum districts of the Republic and which have recently been published, showing the area occupied by each and the annual rent paid by them to the owners of the land under development.

Twenty-four companies only pay no rent, as they own their lands in fee simple.

Fifty-four companies pay an annual rent, of less than five pesos per hectare ($2\frac{1}{2}$ acres). These companies occupy an area of 1,330,196 hectares, and pay a total annual rental of \$1,178,641.08. That is to say, they control an area of 3,325,490 acres, and pay therefor an annual rental of \$589,320.54 American money, or a little over $10\frac{1}{4}$ cents per acre.

Twenty-two companies pay an annual rental of less than \$10 per hectare and control an area of 55,336 hectares (128,340

acres), upon which they pay a total of \$332,509.68 per year, hectare \$500 to \$1,000 American money).

One hundred and twenty-two companies pay annual rental of more than \$10 per hectare and control an area of 70035 hectares (175,087 acres), on which they pay a total of \$4,886,915.45 per annum, equal to \$2,442,457.72 in American money.

The total area of oil territory occupied by all the companies is 1,625,948 hectares (4,064,870 acres), upon which a total annual rental is paid of \$6,898,066.45 Mexican gold, equal to \$3,449,033.22 American money.

Several companies pay very high rentals upon lands that are in production and are especially favorably situated. Thus, one pays an annual rental of \$8,333.33 (\$4,166.66 American gold) per hectare. Another pays \$3,675 (\$1,873 American money) per hectare, and another pays \$4,032 (\$2,016 American gold). Many companies pay more than one to two thousand pesos per hectare (\$500 to \$1,000 American money).

The average rental however, even with these large ones to bring up the total, is \$3.93 Mexican money \$1.96½ American) per hectare. However, out of the total oil acreage of 4,064,870 acres, a total of 3,325,490, as shown, pays an annual rental of but slightly over ten cents per acre. The rentals on the balance of 639,380 acres are sufficient to bring the average up to about 80 cents per acre.

PETROLEUM LEGISLATION.

The question of petroleum legislation to be enacted in Mexico is still pending. The new constitution of Mexico gives the federal government the control of oil resources in the country. In accordance of this constitutional provision, the executive sent a bill to Congress regulating the granting of permits for the development of oil lands. Foreign companies who had been organized under the old legislation which placed the control of the oil resources in the hands of the owners of the lands, protested against the intended bill. The American, British, French and Dutch governments made representations on behalf of such companies and negotiations were undertaken to have the government to modify it radically.

While the legislation was pending, the President of Mexico issued several decrees which regulated temporarily the development of oil fields, requiring the companies engaged in oil development to obtain permits from the government to explore and drill wells and fixing the taxes to be paid for such permits. For details of pending legislation, see Latin-American, Year Book for 1919 (pages 367 to 374).

A number of companies already engaged in oil work applied to the courts of Mexico in order to prevent such decrees from being put in force. Among the companies applying to the courts, the following are the most important:

Appeals against the various petroleum decrees and their application, without any concrete act: The Oil Fields of Mexico Company, Transcontinental Petroleum Company, Soledad Oil Company, Cortez Oil Corporation, Panuco Boston Oil Company,

Panuco Oil Exploration Company, American International Fields and Petroleum Company, East Coast Oil Company, Tuxpan Petroleum Company, Lot Seventeen Company, Continental Mexican Petroleum Company, Juanedo Oil Company, E. L. Doheny and N. Bridge, Penn.-Mex. Fuel Company, Tal Vez Petroleum Company, Capuchinas Petroleum Company, Tepetate Petroleum Company, Amalia Macay Sandoval, Aguada Petroleum Company, Huasteca Petroleum Company, Texas Oil Company, Seaboard Fuel Oil Company, Tancochin Oil Company, The Corona Oil Company, Victor Petroleum Corporation, Grand National Petroleum Company, Mexican Oil Company, Richmond Levering Company, Gustavo Basañez, International Petroleum Company, Leopoldo N. Núñez, Metropolitan Pipeline Company, Indian Mexican Company, Tigre Company, Azteca Petroleum Company, Mexican Sinclair Petroleum Corporation, Scottish Mexican Oil Company, Freeport Mexican Fuel Oil Company, Atlantica Company, Mexican Producing and Refining Company, Adrian Petroleum Company, Piedras Petroleum Development Company, Mexican Petroleum and Agricultural Company of San José, El Azadon Petroleum Company, Tamiahua Petroleum Company, Mexican Petroleum Company El Aguila, United Oil Production Company, Investment and Industry Petroleum Company, Francasneque and Annexes Petroleum Company. Several of the companies named have more than one appeal pending upon the same grounds.

Appeals against the action of the petroleum decrees based upon a concrete act, consisting in the refusal to permit the drilling of new wells or the performance of new work upon lands that have not been manifested (those whose deeds, leases, etc., have not been recorded as provided by laws): Transcontinental Petroleum Company, Huasteca Petroleum Company, East Coast Oil Company, International Petroleum Company.

Appeal against the application of the decrees that permit the admission of denunciations on lands that have been acquired but which are declared free and vacant: The International Petroleum Company.

The following clause appears in all concessions for the exploitation of oil properties: "The concessions will be declared null for any one of the following reasons: For the transfer of this contract or any of its concessions to any foreign Government or to admit it as a partner."

An organization of Italian capitalist is preparing to invest several million dollars in various enterprises in this country, most notably in the petroleum fields, where they have secured upward of 25,000 acres of oil land and will proceed with the sinking of wells, the construction of pipe lines, refineries, etc. They will also establish a direct line of steamers between Mexican and Italian ports and will enter actively into various branches of commercial enterprise and development.

Pending the enactment of the promised legislation, the drilling of wells and the production and exploration of oil are going with increased energy. During July no less than 81 new wells were drilled in the Tampico, Tuxpan and Panuco regions. Of these 45 are in the first named section, eighteen in the sec-

ond and 23 in the last. Seven of the wells are producing oil in large quantity and of excellent quality and in none of them has salt water appeared. One of the new wells has a capacity of 20,000 barrels daily.

The drilling of wells is from 30 to 40 per cent. greater than ever before in the history of the Mexican oil fields.

Of the capital invested in the oil region not less than 65 per cent. is English, the largest companies of that nationality being the Royal Dutch, the Aguila, the Corona, the Concordia, the Petroleum Wells and the Magnolia. The Royal is capitalized for more than all the other leading companies combined. American companies have the second largest capitalization, and Mexican companies the third.

"La República," a Mexican petroleum company, has brought in a well spouting 5,000 barrels daily in the Tuxpan region. It is said to be a veritable geyser of oil.

The Mexican Gulf Oil Company is constructing a ten-inch pipe line from the Tepetate oil wells to the company's shipping terminal in Tampico.

A denunciation of oil lands has been granted in the municipality of Juarez, Chihuahua (across the river from El Paso), as also a denunciation of oil lands in Mapimi, State of Durango.

The following companies have asked for and received permission to undertake the construction of pipelines, tanks and the sinking of new wells recently:

The Poblana Petroleum Company to install a pipeline from its well at Tamboyoché, in the Panuco district, to an embarkation which it proposes to construct on the right bank of the Panuco river.

The Mexican and Boston Leasing Company to construct a plant of steam boilers and various pipelines in Los Chotes, Panuco.

The Texas Company of Mexico to construct a branch of its main pipelines in the Tepetate district ending at Chinampa.

The English Oil Company to commence the work of construction of a pipeline between Tampuche and its property in Miradores, in the Panuco district.

The Transcontinental Petroleum Company to make use of the pipeline it has installed in Tepetate, in the Ozuluama district.

The English Oil Company, to construct a steel tank of 8,744 cubic meters capacity at Tampuche, Panuco district; also one of 3,180 cubic meters capacity in the same locality.

The Mexican Combustible Petroleum Company, to sink another well at Tamboyoché, Ozuluama.

The Aguila Company has asked for and received permission to drill another well to be called Los Higueros No. 1. in the lake of Tamaiahua, Ozuluama, State of Veracruz.

TAXES ON EXPORTS OF OIL.

The average prices on which exports duty on petroleum products was collected in the year 1918 was, in Mexican money: fuel oil, 9.91 density, \$13.00 per ton; crude oil of 0.97 density, \$15.50 per ton; crude oil of a density over 0.97, \$6.00 per ton;

gas oil of a density over 0.91, \$13.00 per ton; refined gasoline, loose or in containers, 12 ½ cents per litre; crude gasoline, loose or in containers, 11 2-4 per litre; kerosene, crude or refined, loose or in containers, 3 cents per litre. The tax is ten per cent. on the official price.

The Government fixes, every two months, the prices on which the export duty must be collected. The prices vary in proportion with the density.

The stamp tax on petroleum lands, was fixed at \$3 Mexican money per hectare or fraction thereof, by decree of August 9th, 1917.

A tax of ¼ cen, Mexican money, per litre of lubricating oils was established by decree of July 9, 1918.

On April 9th, 1918, the Government lifted the moratorium on petroleum contracts, executed previous to May 1st, 1917 for the lease of all lands.

The most important companies engaged in the petroleum industry in Mexico are:

Mexican Eagle Oil Co., Ltd. Incorporated in Mexico in 1908. Capital, \$60,000,000 (Mex.), or about \$30,000,000 American money, in 850,000 8% preference shares and 5,150,000 ordinary shares, of \$10 (Mex.) par value.

By Resolutions of the Company passed in Mexico City on the 1st December, 1919, it was resolved to authorize an increase of Share Capital to 115,113,580 pesos Mexican by the creation of 5,755,679 Ordinary Shares of Ten Pesos Mexican each, and to offer to the share holders of the Company one of such new Ordinary Shares at par for every two Shares, either Preference or Ordinary held by them.

The new shares rank *pari passu* with the existing Ordinary Shares, but do not participate in any Dividend payable on the 31st December 1919.

The company has issued 6% convertible first mortgage bonds.

The Mexican Eagle Oil, Ltd., reports for the year ended June 30, 1919 (in Mexican gold): Profit on trading \$36,868,089, field redemption \$7,686,301, balance \$29,181,788, other income \$770,709, total income \$27,952,497, interest on bonds \$444,372, net profits \$29,508,125, transferred to reserve accounts, etc., \$3,375,406, balance \$26,132,719, brought forward from last year \$2,219,054, total balance available \$28,351,773, dividends \$24,808,491, surplus \$3,443,282.

The Royal Dutch Company and the Shell Oil Company have purchased 2,500,000 shares of the stock of the Mexican Eagle Oil Company. This is one of the largest oil deals of recent years, the amount involved being approximately \$75,000,000. The Royal Dutch and the Shell Companies participate in the purchase on the basis of 60 and 40 per cent., respectively.

Anglo-Mexican Petroleum Co., Ltd., was registered in 1912, under the name of Anglo-Mexican Petroleum Products Co., Ltd.

It markets the products of the Mexican Eagle Oil Co., Ltd. The capital of the company is £2,000,000, divided as follows: 1,000,000 7% cumulative preference shares, and 1,000,000 ordinary shares.

Eagle Oil Transport Company, Ltd., was registered in London in 1912, for the purpose of building and operating a fleet of tank steamers to market the products of the Mexican Eagle Oil Co., Ltd. The capital is £3,000,000 (about \$15,000,000 American money), in 4,000,000 cumulative 6% participating preference shares and 200,000 ordinary shares.

The entire ordinary stock is held by the Mexican Eagle Oil Co., Ltd., and S. Pearson and Son, Ltd.

Mexican Petroleum Co., Ltd. Incorporated in Delaware in 1907. Capital stock, \$51,342,400.00; 398,424 shares common stock of \$100 each—\$39,342,400.00; 120,000 shares 8% non-cumulative preferred stock of \$100 each—\$12,000,000.00. Owns and controls about 600,000 acres of land, 30 oil well, tanks, storage, etc., 10 miles railroad, 8,000 head of cattle, 1,500 horses.

Gross earnings of the company in 1918 amounted to \$26,320,545, as compared with \$18,121,789 in the preceding year, and operating expenses and depreciation increased from \$11,906,309 to \$14,399,744. Important items in the Mexican Petroleum income account follow:

	1918
Gross income	\$26,320,545
Operating exp., depreciation, and other charges	14,399,744
Total income	11,920,801
War and income taxes, int., amort., &c.	5,221,357
Net profit	6,699,444

The balance sheet as of Dec. 31, 1918, shows cost of properties at \$68,344,549, less a reserve for depreciation amounting to \$10,803,961; current assets of \$16,928,762, and current liabilities of \$8,105,664.

Gross earnings of the Mexican Petroleum Company, Ltd., will be at least \$40,000,000 for 1920, according to a statement made by Herbert G. Wylie, vice president and general manager of the company.

The Mexican Petroleum Company is at present drilling seven wells and is also increasing its pipe lines by the construction of a new 10-inch line to take care of the increased production.

Through its connection with the British Petroleum Corporation, the Mexican Petroleum Company has made arrangements for the shipment of 2,500,000 barrels of oil to Great Britain during 1920. In addition the company will ship 5,000,000 barrels in 1921, and 7,500,000 barrels in 1922. The Pan-American Company owns 50 per cent of the capital stock of the British company.

Pan-American Petroleum and Transport Co. Incorporated in Delaware. Capital, authorized, \$150,000,000. Outstanding: Common shares, \$30,494,750; Preferred 7% cumulative shares, \$10,500,000; total, \$40,994,750. Outstanding bonded debt: first lien marine equipment 6% convertible gold bonds, \$4,427,000.

The Mexican Petroleum Co., Ltd., and the Pan-American Petroleum and Transport Co., between them own or control: Mexican Petroleum Co. of California (incorporated in 1910); Huasteca Petroleum Co. (incorporated in Maine in 1907); Tamiahua Petroleum Co. (incorporated in Maine in 1906); Tuxpan Petroleum Co. (incorporated in Maine in 1906); Petroleum Transport Co. (incorporated in Maine), capital stock authorized and outstanding, \$3,000,000, also entire capital stock of the Mexican Marine Co. and Petroleum Carriers, Ltd.; Mexican Petroleum Corporation (incorporated in Maine); capital authorized, \$2,000,000. Head office, 1015 Security Building, Los Angeles, Cal.

The Pan-American Petroleum & Transport Company has thirty-five tankers at present in operation and this number will be increased to forty-five by the latter part of October, 1920.

The Atlantic, Gulf and West Indies Steamship Line, the holding company for the Mallory, Clyde, New York and Porto Rico, the Ward, and the Southern lines, has acquired a controlling interest in a Tampico oil field which is to be utilized for providing fuel for its own ships and bulk cargo for transit.

The oil property will be operated by a company capitalized at \$20,000,000, known as the Atlantic, Gulf Oil Corporation. It will be financed by the Atlantic, Gulf and West Indies line.

Shares of the following oil companies are listed in the Stock Exchange in Mexico City.

Abastecedora, Aguila Nacional, Almanza, Alianza de Perforadores, Alamo de Panuco, Argentina, Bonanza, Calman, Centuaro, Campos Petroliferos, Cantabros Panuco, Florida del Alamo, Consolidada, Costas del Golfo, Covadonga, Cuauhtemoc, Dos Huastecas, Esfuerzo Nacional, Esperanza, Eureka, Equidad, Franco Española, Giralda, Hispano-Mexicano, Inglesa y Anexas, Internacional, La Fe, La Union, Lluvia de Oro, El Manantial, Margenes del Panuco, Meridional, Mexican Oil, Mexico y España, La Nacional, Naco, Oaxaqueña, La Oriental, Orillas del Panuco, Oro Mexicano, Oro Negro, Panuco Mahuaves, Perforadores, Pozos Petroleros, Pan-Americana, Panuco-Tamesi, Panuco-Tuxpam, Papaloapam, Poblana, Progreso, Regiones Petroliferas, Reyes, Riberas Tuxpam, Sabales de Pecero, Topila, Tanjuco y Tamulín, Petrolifera Territorial, Trasatlantica, El Triunfo, La Tampiqueña, Tuxpam Ozuluama, La Universal, Valles, Victoria, Vergel.

FORESTRY.

There are immense quantities of building timber and cabinet wood in Mexico, many species of which are as yet unknown in foreign markets, although they are classed among the most valuable and expensive.

An official list of the various woods in Mexico gives 200 varieties. Among the woods used as construction material the principal are the Algarrobo, Almandril, Ceiba, Granadillo, Guncastle, Guayacán, ironwood, Mezquitillo, Ocote, yellow and white, white oak and several others.

The principal cabinet woods in the country are mahogany, "caobilla," cedar, three varieties, one white and two red; ebony, three varieties, one of them called green ebony; "gateado" and rosewood.

The yearly production of mahogany amounts on an average to about \$1,200,000 Mexican silver, Chiapas, Tabasco, Veracruz, and Campeche supplying the greatest quantity of this valuable wood. Cedar is found in all parts of the country, but the States of Tabasco, and Veracruz contain the largest and the most desirable forests of this wood, cutting annually cedar logs to the value of more than \$1,000,000. Ebony is produced in Tamaulipas, Guerrero, Hidalgo, and Yucatán. Puebla produces a greater quantity of aloe wood than any of the other Mexican States; Coahuila the most oak; Nuevo León the great-

est quantity of walnut; the territory of Lower California, ironwood, while the State of Jalisco is celebrated for its orange wood.

Certain quantities of pine are found in large quantities in the plateau district of Mexico. In one section of the State of Durango, investigation showed some 5,368,500,000 feet of commercial pine, and a tract in the northern part of the State containing 4,800,000 acres was estimated to have 10,000,000,000 feet of commercial pine ready for cutting.

Contracts are made by the government for the exploitation of national forest lands in the different States and territories. The contracts are for five or ten years and refer to the cutting of mahogany and other cabinet or dye woods, or the collection of chewing gum or any other kind of gums or resins, as well as rubber.

In order to obtain such contracts the applicants must make a deposit, in national securities, in proportion to the size of the land, and also pay yearly in advance, at the rate of 50 cents, Mexican money, per hectare or about 20 cents, or 10 cents, American money per acre. The deposit is lost if the initial annual payment is not made within three months after the signature of the contract.

Besides the annual payment the concessionaires must pay to the treasury, for the products obtained at the following average scale in American money: Rubber, per ton, \$50; Chicle (chewing gum), per ton, \$25; Mahogany or cedar, per tree, \$5; Second class woods, per tree, \$2.50; Third class woods, per tree, \$1.25; Dyewoods, per tree, \$1; other products, according to special rate fixed by the government.

The number of concessions granted for the exploitation of national forest lands in 1918 was: 146 for cutting hard woods; 36 for the extraction of chewing gum, and 386 for other products.

The government estimated the rentals from these contracts for the fiscal year 1919-20 at \$100,000.

On the first of March the National Forestry School was formally inaugurated in the municipality of Coyoacan, one of the suburbs of Mexico City. The course of instruction will cover a period of three years. Many students have applied for entry from all portions of the Republic.

FISHING.

The President of the Republic has issued a decree concerning the exploitation of the products of Mexican waters, such as the fishery industry in rivers, lakes, and oceans under the jurisdiction of the nation, and providing that same can be carried on only through concessions or permits granted by the Executive power through the Department of Agriculture and Fomento in accordance with the terms and conditions prescribed by that Department.

Fishing is carried on in a large scale on both coasts. Veracruz, Campeche, Alvarado, Tampico, Acapulco, Mazatlan, Guaymas, are large fishing centers, but they lack storage facilities, and so far no canning is done, notwithstanding the fact that Central Mexico is a very good market for canned fish, which

is imported from the United States, France and Spain. Canneries are badly needed in both Mexican coasts and money invested in this industry will be safe and bear very good profits.

Pearl fishing is one of the most important and picturesque occupations in Lower California. Extensive beds of pearl-bearing oysters exist near La Paz, from where the majority of the pearls are exported. One American pearl-fishing company at La Paz employed a few years ago about a thousand men, and a half-dozen schooners, each of a hundred tons burden.

The predomination color of the pearls found is white, but blue, black, green and multi-colored pearls are often encountered. The shapes are as varied as the colors. Pearls with a golden bluish, or with a faint bluish or rose tint, are esteemed above the finest white specimens. The price of a good pearl ranges from \$100 to \$1,000 Mexican silver. One of the largest pearls ever found in the waters of the Gulf measured about three-fourths of an inch in diameter and was sold in Paris, to the Emperor of Austria, for \$10,000.

In order to regulate pearl fishing in the Pacific coast, the government has divided the coast in two zones which will be worked alternatively every two years.

The President of the Agricultural and Electric Power Co., of Conchos has imported from the United States a thousand specimens of edible fish for breeding purposes.

AGRICULTURE.

With all kinds of climates within its boundaries, Mexico has also practically all kinds of agricultural products. In the hot lands, which are very well watered, forestry products, as well as all kinds of tropical fruits are found in abundance, such as coffee, tobacco, cacao, vanilla, indiarubber, etc. The lack of proper means of transportation is the only thing that prevents the trade of such products to grow as big as it should.

In the temperate lands, cereals are grown. The highlands, however, are not as fertile as the low lands. In the northern plateau, a large section is included in the cotton belt, and the plant is produced in considerable amounts around Tlaxcala, in the State of Coahuila.

The productivity of the soil is very uneven. In certain sections near the coast, three crops of corn can be obtained in the year, while in the high lands of the central plateau the soil has been practically exhausted by continuous cultivation for centuries without the aid of fertilizers, and the crops are poor.

An authority gives the following estimates of the productive land in Mexico:

Unproductive land	400,000	Sq. Km.
Forests (mostly cabinet woods)	100,000	" "
Forests (mostly common lumber)	150,000	" "
Land suitable for cereals	180,500	" "
Orchard lands	121,500	" "
Cities, towns, roads and rivers	100,000	" "
Lands of medium quality	948,000	" "
Total	2,000,000	Sq. Km.

Mexico could produce much greater wealth from her agriculture if the land were systematically cultivated by modern machinery. Out of a total area of 756,537 square miles, about one-fifth is unfit for cultivation or grazing, and only about one-quarter of the remainder is under cultivation now, so that there remains about 386,000 square miles, or say, 247,000,000 acres still to cultivate, the balance being forest lands unsuitable for cultivation even when cleared, although good for grazing.

The whole country, is divided into three parts:

First, the tierra caliente, or hot land, begins at the seashore and extends inland up to an elevation of 3,000 feet, with a temperature varying from 105 degrees to 80 degrees F., and very humid at the coast. In this section is grown every tropical and sub-tropical plant, such as cotton, rice, sugar, coffee, tobacco, fruits, etc.

Second, the tierra templada or temperate land, lying between 3,000 and 6,500 feet, with an average temperature of 73 degrees to 77 degrees F. all the year round, the air being very dry. Here the crops consist of maize, wheat, and other cereals.

Third, the tierra fria, or cold country, lying between 6,500 feet and the snow line, about 12,460 feet in the tropics, with an average temperature of 59 degrees to 62 degrees F., while the valley of Mexico is at a little higher temperature, or a mean of 65 degrees F. In this area most of the cereals and alfalfa are cultivated successfully as well as the maguey, from which pulque is prepared, and all the general vegetables give good crops.

Agriculture, as well as any other business, suffered considerably in Mexico, on account of the revolution, but it is rapidly recovering, crops are generally under the average pre-revolution yield.

Corn.—Indian corn or maize is the chief food of the Mexican people, and some of it is grown in every state. As it is possible to obtain two crops of corn and one of wheat in a year, the agricultural possibilities are immense, if only dependable irrigation is available.

The partial computation of the corn crop of 1918, was given out by the Department of Agriculture. Excluding from this estimate the States of Michoacan, Morelos, Tabasco, and Tlaxcala. It is officially stated that the known production of corn for the rest of Mexico reaches the amount of 1,028,570,535 kilos. Owing to the defective system of collecting statistics it is believed that 50 per cent. of the corn produced in Mexico has not been reported. Following are the amounts in kilos produced in the leading agricultural States: Jalisco, 500,000,000; Zacatecas, 127,740,885; Guanajuato, 84,000,000; Chiapas, 70,000,000, and Sonora, 69,832,170.

The remaining States vary in production from 1,000,000 to 43,000,000 kilos. The States yielding the least during 1918 were the southern district of Lower California, with 193,600 kilos, and those of Campeche, Michoacan, Tamaulipas, and Quintano Roo, aggregating 615,000 kilos.

The average corn crop in the period of 1906-10, the pre-revolutionary period, was 3,219,624,240 kilos.

The area planted with corn in 1918 was 238,696 hectares.

Reports made by the general Bureau of Agriculture states that the corn crop of 1919 was as large as that of 1918, and was great enough not only to satisfy all of the needs of the Republic but also to allow the export to other nations.

The Chamber of Commerce of the state of Veracruz reports that the corn crop in 1919 shows an increase of 20 per cent. over former years.

Wheat.—The wheat crop for 1918 was 642,874,342 pounds, or not as great as it was in 1907, when 686,640,000 pounds were obtained, of which 38 per cent. was from Michoacan, 13 per cent. from Guanajuato, 8 per cent. from Chihuahua, 6½ per cent. from Puebla, 6 per cent. from Mexico, 5 per cent. from Coahuila, 4 per cent. from Jalisco, and 4 per cent. from Queretaro, and the remaining 15½ per cent. from the other states. The average yield in the pre-revolutionary period was 306,782,890 kilos.

There are some 200 flour mills in the republic, with capacities of ten to one hundred barrels a day, and the Mexican wheat is hard and of good quality, and make excellent flour.

Generally not more than 20 bushels of wheat are obtained per acre, and 50 bushels of corn where the land is irrigated. The great problem of agricultural Mexico is a well-conceived plan of irrigation which would yield handsome returns by increased crops and general prosperity.

The area planted to wheat in the northern district of Lower California for year was approximately 10,000 acres. This is about the same acreage as was planted during 1918. Some 90 per cent. if this crop was planted and cultivated by the Guadalupe Russian colony.

Rice.—In 1918 the production of rice was about 27,500,000 pounds while in 1907 it was 68,000,000, distributed amongst the states as follows: Michoacan, 30 per cent.; Morelos, 25 per cent.; Puebla, 10 per cent.; Veracruz, 8 per cent.; Colima, 6½ per cent.; Tepic, 5 per cent.; Jalisco, 3 per cent., and the balance of 6 per cent. in the other states.

Beans.—Next to maize, the Mexican bean, frijol, is the staple diet of the country, and for 1918 the output was about 236,000,000 pounds, which was produced in every state, the greatest being Guanajuato, 14 per cent.; Chiapas, 12½ per cent.; Jalisco, 10½ per cent.; Veracruz, 10 per cent.

It is the opinion, however, that these figures only represent 50 per cent. of the output of the country, the other half not as being reported.

The area reported planted in 1918 was 2,499 hectares.

Sweet potatoes.—A favorite vegetable with the Mexicans is sweet potatoes (camotes) of which the normal production is about 49,000,000 pounds, of which 38 per cent. were from the State of Michoacan alone, 16 per cent. in Guanajuato, 9 per cent. in Jalisco, 7 per cent. in Oaxaca, 5½ per cent. in San Luis Potosí, 5 per cent. in Guerrero, and the balance of 19½ per cent. in the other states.

Ordinary potatoes, to the extent of 44,000,000 pounds produced normally, Chihuahua leading with 33.3 per cent. Tlaxcala, 16 per cent.; Puebla, 12 per cent.; Veracruz, 8 per cent.; and the balance throughout the other states.

The area planted with sweet potatoes in 1918 was 3,672 hectares.

Cotton.—The cotton crop of 1918 yielded a total of 79,653 metric tons, of 2,200 pounds each, distributed as follows: Lower California, 20,603; Coahuila, 35,101; Nayarit, 12,355; Durango, 8,250; Jalisco, 410; Oaxaca, 912; Sinaloa, 618; Sonora, 605; and Veracruz, 588 tons.

The cotton growers in the Torreon region met recently to consider the formation of a protective cotton growers' association but not under Government control.

Cotton growing is one of the branches of agriculture that have recovered more rapidly from the interruption caused by revolutionary activities. The normal crop of cotton in the years previous to the revolution was about 40,000 tons, or nearly one-half of the 1918 crop.

Sugar.—There were 3,077 tons of sugar cane produced in 1918, as against 2,257,144 tons for 1907. In 1907 Oaxaca produced 24 per cent. of the crop. Veracruz, 22 per cent.; Morelos, 16 per cent.; Tepic, 11 per cent.; Puebla 10½ per cent.; Nuevo León, 5 per cent.; Michoacan, 4 per cent.; and the remaining 7½ per cent. in the other states. Ten crops may be harvested from a single planting and the crop is sometimes 35 tons an acre. Modern methods have not been applied largely so far, and during the rebellion many of the sugar factories were destroyed. Great developments are expected on the Pacific slope, especially in the valley of the Fuerte River, but in every case transportation facilities are the important factor.

The 1919 sugar crop was estimated at 120,000 to 140,000 tons. It was also estimated that most of the 20,000 tons of piloncillo in the Republic would be converted into sugar or used as a substitute for sugar. But 80 per cent. of the piloncillo was dedicated to the production of alcohol, and the actual sugar crop harvested fell far short of the estimated production. The total production in Veracruz not exceed 25,000 tons, and that other States fell from 40 to 50 per cent. below their expected output. Drought conditions almost wholly accounted for the shortage.

The sugar-cane fields are reported to be in excellent condition, with a prospect of an increase in the production for the year 1919-20 of approximately 20 per cent. There has been considerable planting of new lands and replanting of old lands which, in two or three years, will be producing fully and should tend to increase the production of sugar in this district provided the disturbed conditions of the country do not prevent.

Henequen or sisal.—This fibre is used in the United States for binder twine for reapers. It is practically all grown in Yucatan. The output for 1918 was 158,066 tons, as against 40,000 tons for 1907 of which 97 per cent. came from Yucatan; 2½ per cent. from Campeche, the remaining ½ per cent. being from Jalisco.

For full details of the Sisal industry and the organization of the Association of Sisal growers for the control of the fiber, see Latin-American Year Book for 1919, pages 424 to 448.

Under a decree of July 24, 1919 the governor of the State

of Yucatan signed a law passed by the State legislature on July 22 providing for the free commerce of henequen and authorizing the regulating association and the planters to rescind the contracts made in accordance with the law of 1915, concerning the control of henequen by that institution.

On August 22, 1919, the directors of the contracting association, known as *Comisión Reguladora del Mercado de Henequén* resigned and were replaced by new men.

The new directors were five in number, with full authority to look into the business of the company's New York office.

All business transactions were stopped in the company's office in Merida, Yucatan, Mexico, until the company's financial state and general conditions could be examined.

The *Reguladora Co.* had at that time 364,000 bales of henequen stored in Campeche and Yucatan, which the company has paid for. This was valued at \$35 United States currency per bale, which would be at the rate of 10 cents United States currency per pound.

The total exportation of henequen from Yucatan for the year 1918 was valued at 48,000,000 pesos. For 1919, it was expected that the output would be even greater, owing to the fact that new markets had been opened in various partes of the world, notably the Argentine Republic, where the fibre is used in the manufacture of grain bags.

On October 4, 1919, the governor of the State of Yucatan issued a decree ordering the immediate liquidation of the *Comisión Reguladora*.

The issuance of this decree was the signal for a united protest on the part of the chamber of commerce of Merida, the capital of the State, as well as from producers of henequen, and merchants in general. The former body appealed to the governor for immediate repeal of the decree on the ground that the liquidation of the *Comisión Reguladora* on the basis ordered by the decree would be severely prejudicial to commerce and agriculture in general.

On the following day the State legislature, after a long debate, repealed the decree complained against, and issued a new law drawn up in accordance with the views of the henequen producers as to the manner in which the liquidation of the *Comisión Reguladora* should be effected. The producers agreed to form a cooperative association of limited liability to take over the assets and liabilities of the defunct organization.

At the same time, a supplemental decree was issued by the legislature authorizing the governor to dissolve the *Comisión Reguladora* and to order the immediate transfer of all its holdings to the new cooperative association of producers, which thus became responsible for the assets and liabilities of the former organization.

The *Comisión Reguladora* has therefore ceased to exist, and the liquidation of its affairs was undertaken by the new association.

The Governor of Yucatan has removed all taxes on the exploitation of henequen with the exception of one which is to

be subject to a duty in proportion to the price of the fiber as fixed semi-monthly by the government of Yucatan.

According to unofficial reports the henequen growers of Yucatan have decided to suspend planting of henequen for a period of three years, due to the low price of the fiber, and Philippine competition. The lands will be used for the raising of cereals and grains.

Cacao.—In 1918, there were 5,500,000 pounds of cacao produced, as against 6,800,000 pounds in 1917, of which 68½ per cent. was produced in the State of Tabasco, 29½ per cent. in Chiapas, and 2 per cent. in Veracruz.

Coffee.—Mexico grew 104,681,390 pounds of coffee in 1918, as against 110,000,000 pounds in 1907, of which 66 per cent. came from Veracruz, 17½ per cent. from Chiapas, 7¼ per cent. from Oaxaca, 2¼ per cent. from Puebla, 2¼ per cent. from San Luis Potosi, and the remainder of 4¼ per cent. from the other states.

The total annual production of coffee in Chiapas is approximately 33,060,000 pounds. The coffee resembles Guatemala's in its various grades, rather lower than higher, yet may easily be substituted for it. This is particularly true of the product of fincas whose altitude is 3,000 feet or more.

The estimated production by nationalities of planters is given in the order of importance:

German, 60,000 quintals; Mexican, 30,000 quintals; English, 20,000 quintals; American, 10,000 quintals; French, 16,000 quintals; Spanish, 8,000 quintals.

This coffee, like other mild coffees such as the Central American brands, was, prior to the war, shipped almost exclusively to Germany and thence routed in considerable quantity to southern Europe. However, upon the closing of the European markets, the Chiapas coffee (known best to the trade as Tapa-chula) was consigned to San Francisco houses, shipments being made from Salina Cruz, as there were railroad connections between that port and the coffee district. Some shipments were made out of Puerto Mexico on the Atlantic side.

The flowering of the coffee trees in 1919 was reported to have been very good in the sense that it was scattered over a greater length of time than usual which will be of marked assistance in gathering the crop. On 1918 25 per cent. of the crop was lost on account of the shortage of labor on the various coffee plantations. The estimate for the crop in Veracruz was that it would run from 150,000 to 200,000 quintals. The conditions of the crop in the State of Chiapas were doubly as good, if not better than 1918 and was expected to be approximately from 200,000 to 250,000 quintals.

The production of chicle in this State during the present year promises to be better both in quantity and quality than during the year 1918. The gathering of the crop will begin about the end of September.

Conditions of the vanilla crop are excellent, the season having most favorable and a crop of 300,000 pounds of whole beans and 20,000 pounds of cuts is expected as against last year's crop of 210,000 pounds of whole and 40,000 pounds of cuts.

Tobacco.—The tobacco crop has decreased considerably, as for 1918 there were 27,904,755 pounds, as against 42,779,000 pounds for 1907, of which 52 per cent. came from Veracruz, 17 per cent. from Tepic $5\frac{1}{2}$ per cent. from Jalisco $5\frac{1}{2}$ per cent. from Oaxaca, 5 per cent. from Michoacan, $2\frac{3}{4}$ per cent. from Chiapas, $2\frac{1}{4}$ per cent. from Puebla, and the remaining 10 per cent. from the other states.

A fiber called ixtle which was produced in 1907 to the extent of 138,000,000 pounds has not been cultivated much lately on account of lack of shipping for export during the war and the disturbances of the rebellion. It is derived from a plant similar to the pulque plant and no doubt its cultivation will be resumed when conditions are more settled.

Chick-peas.—The cultivation and marketing of chick-peas (garbanzos) is one of the most important industries in the southern part of the State of Sonora, the output in 1918 reaching about 328,000 sacks of 100 kilos each, and valued at over \$6,000,000. The outlook for the 1919 was not so promising, and was estimated that the crop would not exceed 75,000 sacks. This is due to destructive storms, lack of money for cultivating, and other reasons.

The total production in the country in 1918 was officially given at 69,303 metric tons, as against 60,535 which was the average in the five year pre-revolutionary period.

The shipment and marketing of the 1918 crop was handled entirely by the Garbanzo Growers' Association (Unión Garbanzera) through a well-known financier and business man residing at Nogales, Sonora.

Heretofore the custom had been for buyers to come in person or by representative to contract for the growing crops, on advance payments of one-half the value of the estimated crop, with a provision for deducting \$1 from the current price as interest for the use of the money advanced.

Practically all the garbanzos are raised in four zones, the Yaqui, extending from Torres to Fundición, the Mayo, from Margarita to Bacavachi, inclusive, the Fuerte River, San Blas, and the Mocorito and Sinaloa Rivers from Narango to Guamuchil, inclusive. More than half of the crop is grown in the Mayo River valley.

The garbanzo movement during the past, according to railway statistics, reflect the situation brought about by the Yaqui disturbances. While the farmers in the Yaqui valley adjacent to Esperanza and Cajeme were able to raise crops, those located farther down the river and in the outlying districts in this section were exposed to Yaqui raids and consequently did not endeavor to cultivate their lands or produce crops.

Guayule.—The guayule rubber is one of the most recently exploited industries in Mexico, although the plant producing this material was known before the Spaniards conquered Mexico, and grows wild in a large section of the country. For complete details about the origin and development of this industry, see Latin-American Year Book for 1919, pages 384 to 388.

Guayule rubber is being manufactured and exported at the rate of about 500,000 pounds a month, but the drop in the price

received for this product in the United States during the past month has left little or no profit for the small plants, and unless the market improves there will be little activity in this industry.

Vegetable wax.—There are great quantities of Candelilla shrub in the northern States. It is found chiefly in the north and northeastern part of the State of Nuevo León. This shrub is grown entirely without cultivation. The average shrub is about 25 inches high. Some plants, however, are about 40 inches in height.

While there are several factories making candelilla wax in this consular district, there is only one large operating at present (with a daily output of about 662 pounds of wax) due to the present low price obtaining for the product in the United States.

OTHER VEGETAL PRODUCTS.

Vegetables, nuts, and fruits of all kinds can be produced in practically unlimited quantities, and there is no doubt that Mexican agriculture by the application of modern methods of cultivation, by irrigation, and a sound financial system of assisting the planters and farmers, can be enormously developed and make Mexico one of the most prosperous countries in the world, at the same time being of the greatest service to mankind in providing large supplies of food at reasonable prices.

The production for 1918 is generally disappointing when compared with that for 1907, and this result can only be accounted for by the wholesale depletion of live stock during the revolutionary years, and the difficulties of farming during that period.

Chicle to the extent of \$2,000,000 a year is now being exported to the United States for the manufacture of chewing gum, and caoutchouc and mesquite gum could be very largely developed, as well as copal gum.

The Department of Agriculture is to establish offices in some of the cities in the most fertile States in the Republic for the exhibition of modern tractors and farming implements, and also to give instructions with regard to their use to the farmers who might be interested.

Large tracts of land will be prepared for cultivation, so that the ranchmen and farmers can have a practical demonstration of the benefits derived from the use of modern farm machinery, see the enormous production, and how economically they can be run.

Seed will also be furnished at a very low cost, and this will be planted and harvested using modern methods and modern machinery with the same object in view.

The Department of Fomento has acquired drills with which to sink artesian wells in different parts of the Republic. These wells are to be drilled for the purpose of aiding and encouraging agriculture.

The first shipment of agricultural machinery ordered by the National Government to sell to agriculturalists at cost in order to stimulate agriculture, was received in Mexico City in

March, 1919, and the plan proved so satisfactory that a further order was placed with several United States firms for plows, cultivators, seed-drillers and harvesters of various classes and sizes.

Since the 1st of February, 1919, numbers of the mormon colonies have been re-established in the State of Chihuahua, where they previously had founded the colonies Dublan and Juarez, removing in 1913 to the United States. They have again taken up their residence in Chihuahua, bringing with them large supplies of agricultural machinery with which to carry on the ranch work in which they have made a remarkable record.

The National Biological Institute recently sent one of its agents to the State of Puebla to conduct an investigation of the moss known as "*Sphagnum papillosum*," an absorbent far superior to cotton, which is found in abundant quantities in the marshy sections of the States of Puebla, Oaxaca and Mexico. According to data published in regard to it, this moss is smoother, softer, and finer than cotton and has greater qualities of absorption, absorbing 18 times its own weight. The best-known species are: "*Pipillosum*," "*compactum*," "*wulflamin*," "*aquarorum*," "*cuspidatum*," "*subsecundin*," and "*capillaceum*." The Government intends to use the vegetable product in Mexican hospitals exclusively, not only because of its desirability from a professional point of view, but also because of its economical cost.

Beekeeping is becoming an important industry on the Isthmus of Tehuantepec. A number of Americans are engaged in this industry and the apiaries in this section of the country at the close of last year contained about 1,400 hives. Bees on the Isthmus are said to be practically free from disease and the bee moth is unknown there. There is a brisk local demand for the wax, and honey brings about 30 cents, gold, a pound.

An agricultural colony composed of Mexicans who have been employed in California has been established in the Valley of Palms, Lower California and another colony of the same character was inaugurated in the Valley of Guadalupe, Lower California, on September 16, 1919. It is proposed to establish other colonies on land suitable for cultivation in Lower California.

The Department of Agriculture will foster the establishment of agricultural colonies in various parts of the Republic by encouraging the small landholder, having appointed several commissions of engineers to survey certain tracts of lands to be used for the purpose after concessions previously granted have been annulled.

A Mexican citizen of Mazatlan recently has been granted a concession of 100 hectares and so much more as may be necessary, at the railway station of Oso, State of Sinaloa, for the purpose of establishing an experimental farm to demonstrate the economic value which would result from the proper use of modern American agricultural machinery in the production of crops.

It is the intention of the concessionaire to rent portions of the land at a nominal cost to American manufacturers of agricultural machinery and implements, who may send experts to

demonstrate the machines with the view both to promoting sales of the American goods and to educating the people in the more modern farming methods.

The Bureau of Viticulture proposed to distribute in February and March, 1920, a million grapevine cuttings, at an approximate price of \$13. per thousand, with the object of encouraging the development of this industry.

With the object of encouraging intensified farming in the State of Morelos, the President of the Republic authorized the Department of Agriculture to present to the government of the State a large assortment of agricultural machinery, including 500 plows with harness equipment, thrashing machines, and other farm implements.

The Secretary of Commerce and Industry is studying a project for the irrigation of the fertile lands of the Valley of Mexico upon a large scale. At present most of these lands only produce a single crop annually, depending entirely upon the rainfall for moisture. Where water is available for irrigation, as among the so-called floating islands, continuous crops are produced, and it is the design of the Department named to construct irrigation works upon a large scale in order that the best possible use may be made of the lands not now so provided. It is believed that in this manner all the food required by the city of Mexico can be produced at its very doors and even a surplus for shipment elsewhere.

CATTLE RAISING.

Certain sections of Mexico are admirably suited for cattle raising. Pasture and water abounds in them, and being scarcely populated, the owners have nothing else to do but to let a few heads of cattle loose there, under the occasional care of a cowboy, and wait until nature accomplishes its task and populates the land with cattle. Great ranches have been formed in such way.

The sections most specially fit for this industry are the Gulf coast, where the transportation facilities are better. Cattle raising is made there in most primitive way. It is only in the central part of Mexico, near the cities, where special breeds have been imported and scientifically conducted farms are seen. All of them are profitable, and this is one of the industries in which foreign capital would be more advantageously invested.

The last census, made just before the revolution, shows that the wealth in cattle, horses, hogs and sheep, was as follows:

	Heads	Value in Mexican Cy.
Cattle	5,304,165	\$84,251,275
Horses	872,544	10,997,667
Mules	340,016	10,742,478
Donkeys	298,416	2,470,547
Sheep	3,458,124	6,096,088
Goats	4,240,916	7,303,289
Hogs	641,074	2,194,457
Total		\$124,055,801

The stock is believed to have greatly decreased during the revolution.

The following are the most important companies engaged in the development of lands and in agricultural enterprises in Mexico:

Foreign and Colonial Lands Co., Ltd. Registered in London in 1911. Office, 3 Lombard St., London, E. C. Capital, \$500,000, American money. Has option over 1,700,000 acres in Yucatan, and oil, timber and land interests of 40,000 acres near Tehuantepec, besides railway timber contracts.

Land Company of Chiapas, Mexico, Ltd. Registered in London in 1905. Office, 10 Copthall Ave., London, E. C. Capital, authorized, \$1,575,000 American money; issued, \$1,125,000, American money. Owns great tracts of land; rubber, cocoanut and fibre plantations.

Lower California Development Co., Ltd. Registered in London in 1890. Office, 10 Copthall Avenue, London, E. C. Capital, authorized, \$1,750,000, American money; issued, \$1,733,375, American money. Held 849,000 acres of land, harbor and town site of San Quintin, and a mail contract with the Mexican government. The assets were transferred in 1907 to the Mexican Land and Colonization Co., Ltd.

Mexican Land and Colonization Co., Ltd. Registered in London in 1889. Office, 10 Copthall Avenue, London, E. C. Capital, authorized, \$15,000,000, American money; issued, \$13,563,7000, American money. Owns large tracts in Lower California and holds railway and irrigation concessions.

British and Mexican Trust Co., Ltd. Registered in London in 1907. Office, 367 Winchester House, Old Broad St., London, E. C. Capital, authorized, \$2,500,000, American money; issued, \$1,508,250, American. Engaged in the development of industries.

Mexican Cotton Estates of Tlahualilo, Ltd. Registered in London in 1903. Office, 119 Finsbury Pavement, London, E. C. Capital, \$1,250,000.

Mexican Crude Rubber Co. Incorporated in Michigan in 1906. Capital, \$1,500,000. Owns factories at Cedral, Viesca, Coahuila, San Luis Potosi.

Tabasco Plantation Co. Incorporated in Delaware in 1901. Office, Plymouth Building, Minneapolis, Minn. Capital, \$5,000,000. Owns 32,000 acres; distillery, cattle, rubber, sugar, cacao.

Mexican Mahogany and Rubber Corporation, Ltd. Incorporated in Canada in 1910. Office, 145 St. James St., Montreal. Capital, \$1,000,000.

California Land Co., Ltd. Registered in London in 1888. Office, 15 Angel Court, London, E. C. Capital, authorized, \$1,250,000 American money; issued, \$998,890, American money. Owns 4,550,000 acres of land in Lower California under title from the Mexican government.

GOVERNMENT LANDS.

In 1912 the amount of government lands available was estimated at 10,000,000 hectares, distributed as follows:

States and Terr. —	Hectares	States and Terr. —	Hectares
Coahuila	105,000	Sonora	400,000
Chiapas	67,000	Tabasco	75,000
Chihuahua	2,300,000	Veracruz	9,000
Durango	750,000	Zacatecas	100,000
Guerrero	650	Lower California	1,000,000
San Luis Potosi	69,000	Tepic	800,000

According to the new Constitution the government has undertaken a general revision of all land contracts and concessions granted by previous governments since 1876 and so far has cancelled contracts and concessions to a total of 73,000,000 acres which had been granted to thirteen individual corporations.

A new survey of the national lands, although not completed yet, shows a combined area of about 68,000,000 acres of lands belonging to the government all over the country.

The titles have been confirmed to 31 agricultural colonies in different sections of the Republic, with a combined area of about 450,000 acres.

The government has purchased several large estates, including two of the largest in the state of Guanajuato, for distribution in small plots.

A commission, appointed by the government for the distribution of communal lands to towns and villages and the restoration of those illegally taken away from different townships, has distributed lands to many communities in different sections of the republic with a combined area of about 220,000 acres, and restored lands to five towns, with a total area of 50,000 acres.

INDUSTRIES.

The mountainous nature of the country greatly increases the supply of water available. It can be safely stated that in every place in the country water power can be found at a reasonable distance to be used and turned into electrical power.

The industrial use of water power in Mexico is very recent. The number, in capacity of the plants now in operation is very small as compared with the power available. It is only an indication of the great possibilities in this line. The most important electrical plants of this kind are: the Juanacatlan, Jal. Falls, with a capacity of 150,000 H. P.; the Necaxa, Pue., which will produce 200,000 H. P.; the Totoapan, in the State of Veracruz, with 40,000 H. P.; the plant of the Compañía Eléctrica e Irrigadora, in the State of Hidalgo, with 15,000 H. P.; the San Ildefonso, with the plant near Mexico City with 12,000 H. P.; and some smaller ones in Orizaba, Querétaro, Teocelo, San Agustín, etc.

With fuel produced in the country in large amounts, water power available all over the country, and with raw materials produced in enormous amounts, there is no reason why Mexico should not be a highly industrialized country.

The only thing that prevents Mexico from becoming an industrial center is the lack of capital which is necessary in modern manufacturing enterprises.

The following table shows the number of persons employed in the different industries in normal times:

Mining	97,345
Agriculture	207,487
Manufacture	757,754

The number of persons employed in the cotton industry was: In 1912, 96,020; in 1903, 86,815; in 1904, 81,368; in 1905, 97,288, and 72,023 in 1906.

The latest Presidents' message states that the industrial census has been taken slowly during the past two years and is about to be completed. He adds that up to September, 1919, 2,805 industrial establishments had been registered, which, being distributed in accordance with a general classification, are thus

grouped: Food industries, 693; textile, 213; metal, 614; electrical, 40, and sundry, 2,245. Taken as a whole, these establishments represent a capitalization of about 240,000,000 pesos, employing 35,000 workers. This census covers only 19 states of the republic.

There are at the present time 1,226 tobacco factories in the Republic distributed by States, as follows: Guerrero, 27; Aguascalientes, 22; Campeche, 2; Guanajuato, 221; San Luis Potosí, 70; Durango, 13; Colima, 8; Mexico, 5; Sinaloa, 38; Chihuahua, 12; Nuevo Leon, 21; Yucatan, 4; Federal District, 32; Michoacan, 95; Oaxaca, 20; Veracruz, 122; Hidalgo, 11; Coahuila, 59; Puebla, 43; Zacatecas, 13; Jalisco, 76; Sonora, 80; Tamaulipas, 129; Lower California, 3; Queretaro, 19; Tlaxcala, 16; Tepic, 44; Chiapas, 1; and Tabasco, 20.

There are two large soap, glycerin, and cottonseed products plants now in operation, one at Gomez Palacio and the other at Torreon. These are producing soap at the rate of about 2,000 metric tons monthly; cottonseed cake, 3,500 tons; cottonseed oil, 30,000 gallons; cottonseed hulls, 2,000 tons; glycerin, 50 tons.

Under the name of the Fomento de Comercio Internacional, S. A. (International Commerce Exchange), a new rubber factory in Mexico City has commenced the manufacture of automobile tires and inner tubes.

It is a private enterprise representing an investment of about \$350,000. The factory, a modern brick and cement structure, has its own electric lighting plant, and is under the supervision of experienced American foremen. About 100 hands are employed at present, but when running at full capacity the factory will employ about 350 men. It also has equipment for the manufacture of raincoats, hot-water bags, and rubber soles and heels, and it is the hope of the owners to manufacture eventually rubber goods of every description. According to a statement made by the president of the company, it is turning out at present 25 tires and inner tubes a day.

There is another small rubber factory at present in Mexico City which is prepared to manufacture rubber tires.

A Mexican firm has established in the City of Mexico a factory for the manufacture of cottonseed oil. The factory is equipped with modern machinery and is to be operated along the most approved scientific lines.

Work is actively under way for installation of a canning factory at the port of Guaymas, where it is proposed to preserve turtle, oysters, fish, tomatoes, fruits, shrimps, corn and peas. About 40 women will be employed at the beginning. It is not intended to can for the export trade except in the case of turtle, shrimps, oysters, and fish.

The large cement plant which was in operation near Monterrey prior to the revolution was temporary abandoned. It was the largest and most efficient in Mexico, having a capacity of 2,000 barrels of cement a day, as against 400 barrels of the Toltec factory near Mexico City.

The Hidalgo plant was closed owing to the fact that its capacity was too great for the consumption.

Before the plant could be opened it was necessary for the railroad from the quarries to the crushers to be relaid, as the ties were destroyed.

The cement produced by this plant was considered of very good grade.

The power for operation is generated from gas furnished by Mexican coal, secured from the near-by Sabinas coal fields. Four 500 horsepower German gas motors were used. About 60 tons of coal were used daily during normal operation. The cement rock quarries are located about 2 miles from the ore crushers, with a narrow-gauge railway connecting them.

A paper factory which will utilize the bark and leaves of the banana so extensively grown in the southern and southeastern States of the Republic has been established in Mexico. The fruit of the trees will be used for the manufacture of banana flour.

It is stated that the American Smelting & Refining Co. proposes to expend \$8,000,000 on its smelting and refining plants situated in various parts of the country, and more than 8,000 workmen are to be given employment immediately in the company's smelters at Azarco, Veladefia and Aguascalientes.

The "Excelsior" is a Mexican shoe made at Tacubaya, a suburb of Mexico City. This product is said to be a fair competitor of the American shoe. They retail at \$12 per pair. Since the duty upon American shoes is about \$1.25 American money, and the cost of import increased to about \$1.50 after paying broker's and other charges across the border, and that the sole of the Mexican shoe is said to be of pure leather, it is likely to increase in use all over Mexico.

Preparations are being made to engage in the manufacture of flour from bananas upon a large scale in the States of Veracruz, Tabasco and Chiapas. It is proposed to utilize the surplus crops that cannot be shipped, owing to their too rapid ripening, and which in the past have been a total loss to the growers. It is expected that this product will to a large extent take the place of wheat flour among the poorer classes while it will be obtainable at much lower prices.

The steel plant located at Monterrey, Mexico, the largest establishment of its kind in Mexico, renewed operations manufacturing steel rails, structural steel, commercial iron, and kindred articles. For past six months it has been operating on a very limited scale, owing to lack of coke and to other obstacles. The steel plant is owned and operated by Spanish and Mexican capital, and is one of the most important manufacturing industries in Mexico.

Only one first-class, up-to-date refinery exists in Mexico, namely that of Potrero, in the State of Vera Cruz. This refinery is run mostly in connection with the Potrero Sugar Plantation, although it refines some sugar outside its own canes. This plant last year prepared for market about 4,000 tons of Cuban and Peruvian raws at a large profit, as the prices then existing between raws and refined sugars varied at high as 10 cents United States currency, per kilo. This, however, was abnormal and can not be counted on in the future.

Mexico during 1918 imported about 25,000 tons of sugars,

of which 10,000 tons were raws, 96 test. The greater part of this amount was consumed by the poorer classes in its raw condition, because of its cheapness. However, were adequate facilities present for the refining of the sugar, more would be consumed in the improved state. The normal consumption of Mexico is 100,000 tons per annum, whereas the present production is about 60,000 tons.

A factory for the purpose of manufacturing overalls, uniforms, shirts, and Palm Beach suits was opened in Piedras Negras, Mexico. The owner is an American citizen.

-A clothing factory was recently established in Ciudad Juarez. At present the production includes overalls, pants, shirts, underwear, mattresses, pillows, comforters, etc., the daily production being valued at about \$800, American money. The plant is operated by electricity with American machinery.

One of the largest rubber manufacturing concerns in the United States is making investigations for the purpose of determining the most suitable locations for the inauguration of four establishments for the manufacture of tires and other objects into which rubber enters.

The Department of the Treasury announced recently that the National Government will no longer grant exemptions or special privileges for the protection of industries and that the importation, free of customs, of agricultural implements and industrial machinery, the right to operate specified enterprises for a definite time, and other like tax-free concessions, have been declared null and void by a decree of the President. As a result, in the future, all capital invested in Mexico, and all imported materials and equipment for use in the various industries, will be subject to the taxes imposed by law.

A National Exposition of Mexican Products will soon be held in Vera Cruz under the auspices of the National Chamber of Commerce of that city to which all similar organizations and industrial companies, as well as foreigners making their homes in the country have been invited.

On lands adjoining the Technical & Industrial Museum in the City of Mexico an experimental laboratory has been installed, in which analysis of numerous natural products will be made in order to determine their industrial application and value. Many of these products are not now utilized because their worth and application are at present unknown. One of the first things it is proposed to study is the employment of the maguey fiber in the manufacture of paper.

The State of Coahuila has just decreed that all industries and manufacturies established within that jurisdiction should be free from taxation for the period of 10 years. The purpose of this law is to attract foreign capital and to encourage the development of local industries.

The following are the principal concerns, besides those already mentioned, engaged in the development of industries, and also in the establishment of electric plants for the industrial and transportation purposes:

Veracruz Electric Light, Power and Traction Co., Ltd. Registered in London in 1906. Office, 47 Parliament St., London. Capital, \$1,750,000. American money.

Santa Gertrudis Jute Mill Co., Ltd. Office, 47 Parliament St., London. Capital, authorized, \$1,000,000; issued, \$753,700. Owns jute mills at Orizaba.

Mexican National Packing Co., Ltd. Incorporated in Maine in 1911. Head office, Mexico City. Capital, \$12,750,000. Holds government concessions for the development of the live stock and meat industries.

Anglo-Mexican Electric Co., Ltd. Registered in London in 1906. Capital, \$1,500,000 American money. Holds controlling interest in the Puebla Tramway, Light and Power Co.

Central Mexican Light and Power Co., Incorporated in Maine in 1910. Main office, Colorado Springs, Col. Capital, \$2,750,000.

Compañía Industrial de Orizaba. Incorporated in 1889. Owns cotton mills at Rio Blanco, San Lorenzo, Cocolapam, and Cerritos, near Orizaba. Capital, \$15,000,000 in \$100 shares, all common. The last dividend paid by the company was in Sept. 1918, amounting to 6 per cent.

Guanajuato Power and Electric Co. Mexico. Incorporated in Colorado in 1902. Head office, Hagerman Buildings, Colorado Springs, Co. Capital, \$5,000,000.

Mexican Electric Light Co., Ltd. Incorporated in Canada in 1905. Capital, \$6,000,000. Properties leased to Mexican Light and Power Company.

Mexican Light and Power Co., Ltd. Incorporated in Canada in 1902. Capital, authorized, \$25,000,000; issued, 19,585,000. Owns large concessions of water power. Controlled by the Mexican Tramway Co.

Mexican Northern Power Co., Ltd. Incorporated in Canada in 1909. Head office, 76 Adelaide St., West, Toronto. Capital, authorized, \$15,000,000; issued \$12,600,000. Formed to acquire all the issued share capital of the Compañía Agrícola y de Fuerza Electrica del Rio Conchos, Sociedad Anónima, a Mexican company owning concessions of water power, lands and railroads.

Michoacan Power Co. Incorporated in Colorado. Capital, \$1,000,000. Worked by the Guanajuato Power and Electric Co.

Monterrey Railway, Light and Power Co. Incorporated in Canada in 1905 as the Monterrey Electric and Gas Co. Head office, Toronto. Capital, authorized, \$5,000,000; issued, \$4,600,000. Owns street railroads, waterworks and sewerage concessions in addition to light and power plants.

Pachuca Light and Power Co. (Compañía de Luz y Fuerza de Pachuca, Sociedad Anónima). Incorporated in Mexico in 1910. Capital, \$4,000,000 (Mexican), all held by the Mexican Light and Power Co., Ltd. The Pachuca Company was originally formed as the Compañía Irrigadora y de Luz del Estado de Hidalgo, Sociedad Anónima.

Tampico Electric Light, Power and Traction Co., Ltd. Registered in London in 1912. Office, 47 Parliament St., London. Capital, \$1,250,000. American money.

LABOR.

Labor in Mexico is plentifully and cheap. It is very satisfactory, as shown by the fact that Mexican laborers are used to a large extent in the southern section of the United States, where farmers, miners and manufacturers seek Mexican workmen. There are not many skilled workmen on account of the lack of training, as the industrial development of the country dates from a few years. However, Mexican workmen learn easily and adapt themselves very rapidly to new conditions. No industry in Mexico has failed for shortage of labor.

Wages are low and vary from one section to another. The general tendency of wages, however, is upward, especially on account of the proximity of the United States, which attracts many thousands of Mexican workmen to American territory.

Seven States of Mexico have enacted laws concerning ac-

cidents to laborers, namely: Nuevo Leon, Sonora, Vera Cruz, Zacatecas, Hidalgo, Chiapas, and Yucatan. The law of Nuevo Leon dates from November 2, 1906; of Hidalgo from 1915; of Zacatecas, from 1916; of Yucatan, from 1917; and those of Sonora, Vera Cruz, and Chiapas from 1918. Among other benefits, the law of Nuevo Leon establishes the following: For death, the payment of the entire wage for 2 years, 18 months, 1 year, or 10 months, according to the amount of debt left by the deceased; for total incapacity, the payment of the entire wage for 2 years; for partial incapacity, either temporal or permanent, the payment of from 20 to 40 per cent. of the wage for two years, 1 year, or 6 months. The law of the State of Hidalgo establishes in case of death the payment to the heirs of 50 per cent. of the salary or wage for 3, 2, or 1 year, according to the debts the deceased may have contracted; in case of perpetual incapacity a sum equal to the salary or wage for 1 year and work of which the injured man is capable must be supplied. According to the law of Vera Cruz in case of permanent incapacity an amount equal to the wage for 4 years or a life pension equal to half the wage earned by the laborer at the time of the accident must be supplied; in case of partial incapacity a sum equal to 2 years' wage or a life pension equal to a quarter of his wage is obligatory. The ruling in Yucatan is that in the first and second cases cited payment shall be made of a sum equal to the salary of 2 years; and in the third event labor must be provided for which the victim is capable or his full wage of 1 year be paid.

The law of Chiapas concedes to laborers and their employers the right of agreeing upon the amount of the indemnities and the term of payment. In Sonora the general manner of the payment of indemnities in case of deaths or total or partial incapacity is established as well as the penalty for minor accidents, such as the loss of a finger, in cases where the injury was the direct result of the work in which the victim was engaged or was caused by lack of proper precautions and safeguards on the part of the employer.

In the Federal District, Mexico City, a new law has been submitted to the national Congress, and is pending. It follows the lines as set forth by the new Federal Constitution (See Latin-American Year Book for 1918, pages 153, 254, and 266 to 277).

The proposed law recognizes the right to strike and lock-out; but declares that strikes shall be unlawful when strikers commit acts of violence against persons or property; in case of war when they might interfere with national defense, and when affecting military establishments.

FOREIGN TRADE.

The foreign trade of Mexico, which was in very prosperous condition until 1913, suffered considerably on account of the revolution first, and later on on account of the European war which closed some markets for Mexican products and also disturbed the shipping.

At the present time Mexican foreign trade is recovering, and

it is expected that as soon as the internal and international situation is entirely settled, it will receive fresh and greater momentum than ever.

The total foreign commerce for the years immediately preceding the revolution was as follows:

Year.	Imports.	Exports.
1903-04	\$177,861,000	\$210,312,000
1904-05	178,205,000	208,520,000
1905-06	220,005,000	271,139,000
1906-07	232,230,000	248,018,000
1907-08	221,757,000	242,740,000
1908-09	156,533,000	231,101,000
1909-10	194,866,000	260,046,000
1910-11	205,874,000	293,754,000
1911-12	186,661,000	298,014,000

The total foreign trade of Mexico for the year 1918 amounted to 531,775,487 pesos, of which 164,470,036 pesos were imports and 367,305,451 exports.

In figures of United States currency, estimating the Mexican gold peso as 50 cents the trade of Mexico for 1918 was: Imports, \$82,235,019; exports, \$183,952,725; total, \$265,887,714.

The imports by principal countries for 1918 were:

United States, \$70,576,314; United Kingdom, \$4,787,725; France, \$1,635,928; Cuba, \$1,377,351; Spain, \$994,577; India, 652,533; Guatemala, \$510,052; Italy, \$332,323; Switzerland, 233,923; Japan, \$166,335; China, \$164,744; Nicaragua, \$129,603; Honduras, \$94,112; Argentina, \$93,665; Peru, 86,935; Salvador, 69,063; Java, \$58,243; Ecuador, \$47,917; Dominican Republic, \$42,969; Venezuela, \$29,249; Colombia, \$26,249; Costa Rica, \$25,863; Netherlands, \$13,455; Sweden, \$6,599; Chile, \$2,175; Canada, \$2,609; Norway, \$651; Germany, \$292; Belgium, \$100; Other countries, \$73,557; Total, \$82,235,019.

The imports by classification were:

Animal products, \$9,990,936; Vegetable products, \$18,992,998; Mineral products, \$14,404,460; Textiles, \$14,326,997; Chemical products, \$5,319,312; Alcoholic beverages, \$618,616; Paper, All kinds, \$1,535,236; Machinery and accessories, \$5,625,905; Vehicles, \$3,299,730; Arms and explosives, \$1,111,098; Miscellaneous, \$7,009,731; Total, \$82,235,019.

The exports by principal countries of destination in 1918 were:

United States, \$175,037,172; Chile, \$2,242,058; United Kingdom, \$2,186,313; Cuba, \$1,514,585; Spain, \$827,705; Argentina, \$448,806; British Honduras, \$418,580; Panama, \$364,413; Guatemala, \$281,783; Brazil, \$242,390; Japan, \$125,696; Honduras, \$51,944; Peru, \$45,850; Nicaragua, \$30,251; Costa Rica, \$16,363; Salvador, \$5,810; France, \$3,006.

The exports by classification, were:

Animal products, \$9,784,850; Vegetable products, \$64,468,662; Mineral products, \$106,966,171; Manufactured products, —; Miscellaneous, \$2,433,042; Total \$183,652,725.

Mexico's principal buyer, of course, was its northern neighbor, with purchases valued at 350,074,345.24 pesos, or approximately 95 per cent. of the total of Mexico's exports. Of

European nations, England occupied the first place as a buyer, with a total of 4,372,626 pesos, while France imported only 6,015 pesos' worth of merchandise. Aside from these two European countries, the only other one which engaged in trade with Mexico to any extent was Spain, purchasing 1,655,111.40 pesos' worth of products. The difference in the volume of exports to France and Spain may be accounted for in the fact that not a single vessel of the former nation called at a Mexican port for ordinary merchandise, while the Spanish lines, with some exceptions, maintained their regular services in 1918.

The South American countries occupy an important place, with the unprecedented purchases amounting to 6,000,000 pesos. This was largely due to the closing of European markets and the North American export restrictions which forced the southern countries to buy not only raw materials but also finished products in Mexico.

Japan has recently begun to show indications of a desire to participate in Mexican trade, and is said to be preparing to compete with the United States and with European nations for its share of this commerce. Jitsutaro Koike, president of a large manufacturing concern of Yokohama, Japan, was in Mexico for some time studying the resources of this country and determining the possibilities of commercial interchange along the lines in which he is particularly interested. He visited several cities and States of the Republic, and has formulated plans for the stimulation of trade between Japan and Mexico.

Japan is interested not only in finding markets for Japanese products, but also in initiating the exportation of certain raw products of Mexico which are in great demand in Japan.

TRADE WITH THE UNITED STATES.

The importance of Mexican trade with the United States is seen from the following figures, in American money, for the years ending June 30, 1912-1918:

	Imports From Mexico	Exports To Mexico
1912	\$ 65,915,313	\$ 52,847,129
1913	77,543,842	54,383,424
1914	92,690,566	38,748,793
1915	77,612,691	34,164,447
1916	97,696,544	47,945,519
1917	112,138,677	79,004,597
1918	175,037,172	70,576,314
1919 (11 months)	145,580,757	108,430,012

The trade between Mexico and the United States for the whole year of 1919 showed an increase of over 34 million dollars as compared with the year 1918. It is given by the American Chamber of Commerce of Mexico City at \$280,378,277.

The itemized list of goods exported by Mexico to the United States in 1918 is as follows:

Agricultural implements, and parts of, \$100; Animals, \$3,369-293; Antimony, \$575,956; Art works, \$10,658; Asphaltum and bitumen, \$151,868.

Bones, hoofs, and horns, unmanufactured, \$88,934; Brass, fit only for remanufacture, \$37392; Breadstuffs, \$105,318.
 Chemicals, drugs, dyes, and medicines, \$2,094,553; Cocoa, or cacao, crude, \$184; Coffee, \$3,336,131; Copper in ore, etc., \$23,518,985; Cotton, and manufactures of, \$4,446,728.
 Dyewoods, in a crude state, \$357,290;
 Earthen, stone, and china ware, \$14,693.
 Fertilizers, \$182,374; Fibers, vegetable, and textile grasses, and manufactures of, not elsewhere specified, \$51,776,172; Fish, \$345,691; Fruits and nuts, \$128,350.
 Hair, unmanufactured, \$34,822; Hats, bonnets, and hoods of straw, etc., \$177,186; Hides and skins (except fur skins), raw or uncured, \$6,244,678.
 India rubber, etc., unmanufactured, \$1,792,768; Iron and steel, and manufactures of, \$419,958.
 Lead, and manufactures of, \$9,765,333; Leather and tanned skins, \$172,530.
 Meat and dairy products, \$1,108; Metals, and manufactures of, \$381,963; Minerals, crude, \$111,607.
 Oil cake, \$186,294; Oils, \$20,914,459.
 Paper stock, \$7,957; Plumbago, \$106,779; Precious and semiprecious stones and imitations of, \$18,731.
 Seeds, \$1,180,149; Shells, unmanufactured, \$10,233; Spices, \$46,744; Spirits, wines, malt liquors, and other beverages, \$1,183; Stone, marble, and manufactures of, \$1,232; Sugar-Cane, \$1,147,765.
 Tobacco, and manufactures of, \$142,468; Tungsten-bearing ore, \$214,072.
 Vegetables, \$2,194,335.
 Wax, \$118,370; Wood, and manufactures of, \$1,305,304; Wool, and manufactures of, \$161,128.
 Zinc ore or calamine, \$1,866,487.

The American goods imported by Mexico in 1918 were as follows:

Abrasives, \$46,128; Agricultural implements, and parts of, \$926,323; Aluminum, and manufactures of, \$32,894; Animals, \$774,355; Art works, painting, and statuary, \$9,332; Asbestos, manufactures of, \$98,459; Athletic and sporting goods, \$60,487.
 Babbit metal, \$26,879; Billiard tables and accessories, \$24,158; Blacking (including shoe paste, etc.), \$131,008; Bones, hoofs and horns, unmanufactured, \$6,070; Brass, and articles made from, \$272,652; Breadstuffs, \$12,225,028; Bronz, manufactures of, \$33,187; Broom corn, and manufactures of, \$34,638; Brushes, \$63,466; Buttons, and parts of, \$121,204.
 Candles, \$121,224; Cars, automobiles, and vehicles, \$3,789,910; Celluloid, and manufactures of, \$76,555; Cement, hydraulic, \$324,928; Chalk, manufactures of, \$7,230; Chemicals, drugs, dyes, and medicines, \$4,217,556; Chewing gum, \$24,326; Clays, fire and other, \$211,42; Clocks and watches, \$54,236; Coal and coke, \$3,173,415; Coal tar, \$4,011; Cocoa and chocolate, prepared, etc., \$114,392; Coffee, \$34,758; Confectionery, \$42,753; Copper, \$118,460; Cork, manufactures of, \$44,742; Cotton, \$20,126,318.
 Dental goods, \$11,007.
 Earthen, stone, and china ware, \$493,526; Eggs, \$498,261; Electrical machinery, appliances, etc., \$1,674,159; Explosives, \$1,576,580.
 Feathers, \$6,122; Fertilizers, \$10,140; Fibre, vegetable, manufactures of, \$657,650; Fire extinguishers, \$10,523; Fish, \$619,530; Flavoring extracts and fruit juices, \$35,612; Fruits and nuts, \$830,800; Furniture of metal, \$106,479; Furs and fur skins, dressed, and manufactures of, \$56,604.
 Glass and glassware, \$775,592; Glucose and grape sugar, \$12,954; Glue, \$26,568; Gold and silver, and manufactures of, including jewelry, \$66,999; Grease, \$88,349.
 Hair, animal, and manufactures of, \$10,199; Hats, and materials for, \$317,423; Hay, \$159,756; Honey, \$9,221; Hops, \$44,438.
 India rubber, and manufactures of, \$1,433,165; Ink, \$89,142; Instruments, and apparatus for scientific purposes, \$85,672; Iron and steel, \$19,393,137.
 Lamps, chandeliers, and all devices for illuminating, 1,615,555;

Lead, \$40,337; Leather, \$3,623,508; Leather, imitation, \$27,785; Lime, \$13,015.
 Malt, \$207,129; Matches, \$52,915; Meat and dairy products, \$3,820,033; Metal polish, \$4,531; Metals, not otherwise specified, \$49,094; Mica and manufactures, \$3,396; Motor boats, \$111,630; Mucilage and paste, \$9,782; Musical instruments and parts, \$156,327.
 Naval stores, \$31,119; Nickel and manufactures, \$5,887; Notions, \$115,470; Nursery stock, \$17,652.
 Oakum, \$14,634; Oil cake and meal, \$580; Oilcloth and Linoleum, \$82,559; Oils, \$1,999,331.
 Paints, pigments, colors, and varnishes, \$525,116; Paper stock, \$15,117; Paper and manufactures, \$1,897,338; Paraffin and paraffin wax, \$804,466; Pencils and pencils leads, \$121,475; Penholders, \$3,613; Pens, except gold, \$8,292; Perfumeries, and other toilet preparations, \$145,912; Photographs, graphophones, gramophones, and materials for, \$78,365; Photographic goods, \$205,048; Plaster, \$5,974; Plated ware (except cutlery and jewelry) \$56,557; Plumbago and graphite, and manufactures, \$117,792; Refrigerators, \$14,239; Roofing felt, \$131,910.
 Salt, \$79,228; Sand and gravel, \$10,733; Seeds, \$1,947; Shoe findings, \$77,436; Silk manufactures, \$86,532; Silk, artificial, and manufactures, \$108,130; Soap, \$2,428,180; Spices, \$48,023; Spirits, wines, malt liquors, and other beverages, \$354,853; Starch, \$102,803; Stearin, vegetable, \$640; Stone (including marble), and manufactures, \$59,178; Straw and palm leaf, manufactures, \$15,312; Sugar, refined, \$1,548,418; Surgical appliances (except instruments), \$110,438; Suspenders and garters, \$60,556.
 Tin pig, bars, etc., \$4,871; Tobacco, and manufactures, \$295,529; Toys, \$160,513; Trunks and traveling bags, \$48,168; Type, \$17,544; Typewriter ribbons, \$26,925.
 Umbrellas and parasols, \$23,170.
 Vegetables, \$1,041,213; Vinegar, \$6,504; Vulcanized fibre and manufactures, \$4,668.
 Wax manufactures, \$17,878; Wooden manufactures, (including furniture), \$4,490,278; Wool, unmanufactured, \$11,302; Wool, manufactures, \$566,367.
 Zinc and manufactures, \$709,482.
 Dry colors, \$80,968; Ready-mixed paints, \$103,947; White lead, \$16,421; Oxide of zinc, \$29,497; Varnish, \$34,903; All other, \$107,008.
 Total, \$372,744.

Since the beginning of the European war the exportation of hides from Mexico has been made only to the United States. Present export duties on hides and skins are as follows: Green hides, \$0.0575 per pound; dry hides, \$0.0758; goatskins, \$0.1239; and deerskins, \$0.0780.

The Mexico City *rastro* take off is considered in the New York market as good, especially the Mexico City "packer hides", as they are called. Most of the exporters doing business in Mexico have their own hide cellars, with offices and employees under the direction of Americans. All hides purchased by exporters at the Mexico City slaughter house are salted by experienced men, just as it is done in the United States. Apparently only one American tanner is buying the raw or cured stock in Mexico City, all the other buyers being hide exporters with connections in the United States.

The best hides in Mexico come from the Huasteca and the west-coast country. However, stock raising has been almost abandoned in those regions since the owners have found it difficult to ship cattle to market. In certain sections of the country where there are well-defined seasons, the hides vary accordingly, but in the upland sections of Mexico, on the plateau, the hides are about the same all the year round.

In the fiscal year 1918 the United States shipped almost as

many tractors to Mexico as to all other Latin-American countries, Mexico's share lacking only 34 of the combined total of the others. The leading position of this country in the export trade in tractors is due to the action of the Mexican Government in stimulating agriculture by exempting farming implements from import duty, and even by importing such machinery for sale at cost to Mexican farmers. The secretary of the Mexican Department of Agriculture visited the United States, where he purchased a supply of tractors and other implements, to be used in demonstrations at the different sections. The caterpillar type of tractor appears to be most popular and best adapted to the needs of the country, though other types are being demonstrated with satisfaction in some localities.

On account of the high prices of leather shoes, imported or made locally, a demand has arisen in several Mexican towns for canvas shoes with rubber soles. Both white and colored styles are popular, although the latter, such as tan and gray, seem to be the better sellers. In addition to the lower price of the canvas shoes, the fact that they are very comfortable and sufficiently warm in the semitropical climate, even in the winter months, should contribute materially toward their coming into general use, particularly among the thousands of people who are too poor to buy leather shoes.

There should be a large demand for windmills in the Pacific coast if the proper sort of windmills can be placed on the market. The dry season there lasts for six months, from the last of October until May 1. During that time not a drop of rain is to be expected, and irrigation must be depended upon for the growing crops.

Windmills of the ordinary pattern have been introduced on several occasions only to be thrown down by the storms. What is wanted is a mill with a very low tower, not more than 14 or 16 feet in height but of twice the ordinary width at the ground and powerfully braced. Such a pattern could alone resist the northers and would meet with a ready sale if placed on the market.

People of the better class all over Mexico are wearing American-made shirts, with and without collars attached, and cheap grades with collars attached are also being sold to the workingmen, especially those in the cities, although in the case of the cheaper shirts, particularly of cotton goods, there is much competition to be met with in the form of Mexican products. The imported shirts are usually of cotton goods and linen and, to a small extent, of silk. Woolens and heavy materials are not much in demand, even during the short cool season of the year.

Recently the imported shirts are almost entirely of American manufacture.

After Cuba, Mexico is the United States' best paint customer in Latin North America. The total exports of American paint and varnish to Mexico in the first half of the 1919 fiscal year were 35 per cent. more in value than the American exports of these products to all the six countries of Central America, the Dominican Republic, and Haiti combined and \$50,191 more than

those to South America after deducting those to Argentina, Brazil, and Chile. Mexico is one of the five great Latin American markets for paint. The statistics of exports in the first half of the 1919 fiscal year indicate a total paint export to Mexico amounting to more than \$700,000 during the year, a figure unequalled in the paint trade with that country.

During the years of the more serious political disturbances in Mexico American exports of paint declined, though never falling below \$100,000 a year. The exports of paint and varnish from the United States to Mexico in six months of 1919, were:

Dry colors, \$80,968; Ready-mixed paints, \$103,947; White lead, \$16,421; Oxide of zinc, \$29,497; Varnish, \$34,903; All other, \$107,008; Total, \$372,744.

Since the beginning of the European war practically all textile goods sold in the Pacific coast have been obtained from the United States, chiefly from export houses located at San Francisco, Los Angeles, and El Paso. The wholesale houses at Nogales, Ariz., on the international line, are enjoying a good trade along the west coast. As a general rule the orders are small, but prompt delivery is desired, even though the cost may be a little higher.

There is a big demand throughout all of Mexico, for light and medium weight cotton, worsted, silk, and artificial silk sweaters of standard colors.

Better grade hosiery is also in great demand. Cheap hosiery is not salable as the imported article can not compete with that made in the country, but for cotton, lisle, silk and artificial silk, in solid and fancy colors, there is a ready market.

There is considerable light hardware material in Mexico. Agricultural implements are at present exempt from import duty in Mexico, and Government officials state that they are encouraging farming in every way possible.

There is a favorable market in Mexico City for certain classes of glazed tiling for walls and floors. The most popular tiling known to the market is an English product 6 by 6 inches in size, but this is now very scarce and difficult to secure leaving a favorable opening for the customary American made, 3 by 6 inches in size. The market calls for various colors.

Another tile that would find ready demand here is a flat—preferable red—slightly glazed tile to be used in building charcoal stoves.

The number of motor vehicles in Mexico City and suburbs that comprise the Federal District, is: Pleasure cars (private), 2,337; for public use, 1,916; jitneys, 1,104; motor trucks, 136; total number of cars in Mexico City, 5,493; the total number of cars in the Mexican Republic is 18,000.

It is estimated by dealers in Mexico City that 2 per cent. of the population of this city are able to purchase cars.

The automobile business in Mexico in 1919 was exceedingly good.

There has been considerable activity in the sale of the more expensive cars, accompanying the scrapping or selling of a large number of secondhand cars used during the period when new cars could not be obtained. A large number of sales have been

made directly from the United States. Indeed, there are many cars used at present in Mexico City which have no representatives actively at work in the Republic.

'Promotion of trade with the United States.

The American Chamber of Commerce of Mexico, which was organized toward the close of the war by the American business men of Mexico City, and began at once its work of developing trade between the United States and Mexico, has lately moved into larger rooms in the downtown center of Mexico City, and is becoming the headquarters of American business interests in Mexico. The chamber, which began its work with 65 members has now 203 members in Mexico and 177 in the United States, the list representing many of the largest concerns in both countries buying and selling in Mexico. Most of the members are American manufacturers and their agents. The principal lines included in the membership are steel and iron, banks, locomotive and car builders and railway supplies, machinery of all kinds (principally mining, oil, sugar, and electrical), shoes and shoe findings, dry goods and kindred lines, agricultural implements, heavy and light hardware, lumber millinery, coffee, chewing gum, candy, candles, and exporters and importers handling everything made in the United States and produced in Mexico.

The chamber prints a monthly journal.

Following is a list of the local Chambers of Commerce in Mexico, which are legally recognized and in affiliation with the National Chamber of Commerce, whose headquarters are in Mexico City:

Aguascalientes; Acapulco, State of Guerrero; Campeche; Ciudad Juarez, State of Chihuahua; City of Mexico; Industrial Chamber of Agriculture and Mines, Ciudad Juarez, Chihuahua; Colima;; Cordoba, State of Veracruz; Cananea, State of Sonora; Ciudad Victoria, State of Tamaulipas; Chihuahua City; Industrial Chamber of Agriculture and Mines, Chihuahua City; Durango; Guadalajara, State of Jalisco; Guanajuato; Guaymas, State of Sonora; Hermosillo State of Sonora; Irapuato, State of Guanajuato; Jalapa, State of Veracruz; Leon, State of Guanajuato; Laguna del Carmen, State of Campeche; Matehuala, State of San Luis Potosi; Matamoros, State of Tamaulipas; Monterrey, State of Nuevo Leon; Morelia, State of Tamaulipas; Monterrey, of Yucatan; Orizaba, State of Veracruz; Puebla; Chamber of Agricultural Industry, City of Puebla, State of Puebla; Chamber of Commerce and Agriculture, Paso del Macho, State of Veracruz; Queretaro; Saltillo, State of Coahuila; Chamber of Commerce, Industry and Agriculture of Tampico, State of Tamaulipas; Tulancingo, State of Hidalgo; Tehuacan, State of Puebla; Tepic, State of Nayarit; Toluca, State of Mexico; Chamber of Commerce of the Laguna District, city of Torreon, State of Coahuila; Chamber of Agriculture, of the Laguna District, city of Torreon, State of Coahuila; Veracruz; Zacatecas.

To encourage the immediate development of trade between Chicago and Mexico the Chicago Association of Commerce is

opening at once a branch office in Mexico City. The plan of the Mexican bureau of the association, with headquarters in Chicago, is to provide for the needs of the present situation with respect to commerce and friendly with Mexico. In addition to the office in Mexico City others will be opened at various points in Mexico as quickly as developments warrant.

Inquiries for American goods will be telegraphed or cabled by representatives in the field. These will be communicated to firms listed with the bureau which are in a position to supply the designated articles. Bids will be forwarded through the Chicago headquarters, and when business is closed the field representative will act as the agent of the concern making the sale. He will be compensated on a commission basis, the rate to be agreed upon at the time the bid is forwarded. The Mexican trade bureau is to be operated as nearly as possible on a self-supporting basis, each interested firm paying a registration fee. Necessary expenses and telegraph and cable tolls will be prorated among those directly involved.

The first part of July 1919, the Association of the Chambers of Commerce of Texas opened an office for Mexican trade to encourage commercial relations between the two countries.

The National Board of Trade of the City of Veracruz were invited by the Board of Trade of Liverpool to send a number of Mexican students to the latter place for educational purposes, and especially with the object of studying British Commercial methods. Students who lack resources are promised work at remunerative wages.

The Mexican Government has sent three new commercial agents to the United States and one to Spain, and the Department of Industry, Commerce and Labor has issued a circular to Mexican consular officers, requesting that they submit full data relating to concerns interested in Mexican products.

Requirements of Mexican importers.

In order to bring the requirements more clearly to the attention of American firms exporting to Mexico the Department of Commerce of the United States has made a careful investigation of the requirements, and it is suggested that exporters to Mexico would do well to follow as closely as possible the suggestions contained in a report made by U. S. Consul Wilbur I. Gracey.

Mexican firms complain that firms in the United States fail to promptly acknowledge receipt of their orders. It is more than ordinarily important that orders should be immediately acknowledged, and this becomes even more important if the firm is doubtful whether it can promptly fill the order or not. Firms in the United States should therefore immediately acknowledge the receipt of orders, and if possible inform the Mexican importer of the probable date when the goods can be shipped. Even a mere acknowledgement is of value to the Mexican firm, as it then knows that the order has been received and will presumably be acted upon in due course of business.

So much importance is attached to the careful documenta-

tion of goods for Mexico that most importers of goods there hold American exporters responsible for errors contained therein and expenses incurred by them as a result of noncompliance with the instructions given by them.

On each order sent there is usually a sentence somewhat as follows:

This order is placed with the express understanding that its acceptance by you is an acceptance of the conditions named herein, and an assumption on your part of the liabilities for demurrage, storage, or for any fines which may be imposed by the Mexican customs authorities by reason of your failure to comply with the instructions contained herein.

One firm states on its orders, "By following above rules, delays will not occur at the border, possibility of fines be lessened, and other annoying circumstances be avoided, such as: Trying to locate shipper or consignee, securing values, securing weights, locating destination, unloading to weigh and count packages, unloading to see how many boxes, crates, sacks, bundles, and barrels there are."

The usual instruction regarding orders are as follows:
Please acknowledge receipt of this order.

This order is placed with you with the express understanding that the material will be shipped at once unless otherwise specified on the face of the order.

Always refer in correspondence to the designation and order number.

Marks: Each package must be marked in large characters showing the designation and order number, together with the full shipping address as noted on the face of the order.

Packages must be numbered consecutively from 1 up.

Invoices and packing lists showing complete information in regard to order number, date of shipment, etc., must be sent in quadruplicate, accompanied by copies of letters transmitting documents to forwarding agent.

Separate invoices must be rendered for each shipment.

Separate invoices must be rendered for each order.

When shipping the goods on inclosed order, show routing plainly on bill of lading.

Always consign shipment in care of our customs agent at the port of entry as given on the face of this order.

Provide the customhouse broker with: A copy of the commercial invoice, original manifest or shipping list, copy of bill of lading.

Provide us with: Commercial invoice in triplicate, copy of manifest or shipping list, giving detailed weights. Original bill of lading signed by agent on form of transportation company receiving the shipment.

According to the tariff of the Mexican customhouse, all duties are collected upon the weight of the goods. As the case may be, the weight is based on gross, legal, or net weight of the merchandise. You must, therefore, be careful to give the weights correctly, as follows:

First, Gross weight: This is the total weight of each package

as it is shipped, the combined weight of the goods and all interior and exterior packing.

Second, Legal weight: This is the weight of the goods plus the weight of the interior wrappings, cardboard, tin or glass packages in which the goods are contained, but not including the outside protective case.

Net weight: This is the weight of the goods without any packing whatsoever.

Furthermore, it is desired that the packing lists give all information possible with regard to class of materials of which the various articles are made, particularly with hardware, dry goods, etc., and all purely technical names and abbreviations must be avoided to permit making declarations in the consular invoices intelligently, as Mexican duties vary accordingly, and any erroneous declaration is fined by assessment of double duties.

Great care must be taken to have the marks and numbers of the packages agree in every respect with the shipping documents, as a heavy penalty is imposed by the Mexican customs of any accuracy in weights, marks, numbers, contents, etc., of packages.

Packing lists must show the marks and numbers as they actually appear on each package, also the gross, net, and legal weights of each class must be given separately, as most Mexican duties are imposed on weights.

State kind of package, whether box, barrel, bale, crate, etc.

The railroad companies in Mexico require that original bill of lading must be presented against delivery of merchandise. Failure to deliver this document necessitates giving a bond, and causes expense.

It can not be too strongly pointed out how important the various instructions are. There is a too general tendency among exporters in the United States to believe that they know about shipping goods abroad better than the merchant in Mexico does, but this is a constant mistake. The merchant abroad has very important reasons for requesting compliance with his instructions, and failure to follow these instructions carefully and completely almost always results in delays, and usually in fines, or heavy extra expense either to the importer or the American exporter.

Automobile importers require generally the following method for handling shipments:

Packing.—Pack goods securely for water transportation. Iron strapping is cheaper and more effective than heavy boxing.

Marks and numbers.—Mark packages with brush or stencil as per attach design also with gross and legal weight on each. Show these marks and numbers on every document relating to the shipment. Number packages consecutively. Do not place any other marks or numbers whatever on the packages.

Invoices and packing lists.—Make five invoices and four packing lists. Send original and two copies of invoice and original and one copy of packing list to us. Send two copies of each to forwarding agent in New York. Show contents of each package and itemized prices on each invoice. Show gross and

legal weight of each package on packing lists; also the marks and numbers as they actually appear on the packages. If a package contains more than one class of goods give legal and net weights of each kind.

Show on invoices and packing lists the measurement of each package.

New York shippers will send two copies of invoices and two copies of packing lists to the New York forwarding agents, who will give instructions for delivery to steamer.

When shipment is requested to be forwarding agents with two copies of invoices and two copies of packing lists immediately shipment is made.

The great majority of auto-tire importers in Mexico City prefer to have their tires packed as follows: First, each tire should be wrapped individually in heavy manila paper and then made up in bundles of from three to six tires, according to size. These larger packages should be wrapped in extra heavy water-proof paper or hem cloth to insure their arrival in fresh condition. Duty is \$0.70 United States currency per kilo. The cost of inner tube is \$0.85 cents United States currency per kilo. Exporters, when packing, should remember that duty is specific and payable on gross weight, which includes total weight of contents plus packing and crate.

Goods destined for inland mountainous districts should be packed in bundles of a size enabling a mule or burro to carry two of such bundles. A strong mule can carry two bundles weighing 225 to 250 pounds, while burros can carry two bundles about 80 pounds each. Burros are being used to facilitate packing to mining districts. Their substitution for mules is due to political conditions, which have rendered the latter very scarce. Such goods as cables should be packed lengthwise for transportation with several animals.

Correspondence with American importers should by all means be in Spanish. Mexican courts will not admit as proof correspondence or documents in any other language. When English is used the Mexican buyer has the advantage, since he can present his English correspondence in any court in the United States.

Consular and Customs Regulations.

Many changes have recently been made in the Mexican import and export tariffs and customs regulations. Frequent recourse has been made to the law authorizing the President to modify import and export duties without first submitting the proposed changes to Congress.

Under the circumstances, the publication of the complete tariff is valueless. American exporters should inquiry directly about duties actually in force.

Power to adopt discriminating tariffs was conferred upon the President by law of December 24, 1917. Under this law "the Executive is authorized, while the abnormal conditions arising from the past world war continue, to adopt differential

rules and tariff schedules for the various nations with which Mexico has commercial relations, in order to favor commerce with such countries as place no restrictions of any kind on their commerce with the Mexican Republic." No action was ever taken under this authorizations, but the changes in the Mexican export duties and regulations have been especially numerous. Official values have been fixed for determining the export duties on hides and skins and henequen, which were placed on ad valorem basis, while the duties on green guayule and on rubber and guayule gum specified in the same decree have been reduced to 3 per cent. and 2 per cent., respectively.

A circular of January 4, 1918, provides that the commercial invoices covering shipments to Mexico must bear at the foot a sworn declaration signed by the manufacturer or seller to the effect that the values stated therein are correct. The declaration must be presented to the consul, together with the consular invoice. The invoice bearing the declaration is to be retained by the consul, a note to that effect being made on all the copies of the consular invoice. Fraudulent declarations are punishable by a fine of from 10 to 100 pesos, in addition to the amount of the consular fees avoided. The declaration on the commercial invoice is not required of commission agents and similar representatives, who must, however, sign the declaration in the consular invoice.

On January 4, 1919, the President issued a decree re-establishing the following import duties on certain foodstuffs: Rice, $2\frac{1}{2}$ cents (American currency) per kilo (2.2046 pounds); lard, 5 cents; beans, oats and potatoes, 1 cent; wheat and all other flours, $2\frac{1}{2}$ cents; sugar $2\frac{1}{2}$ cents. Corn and unmilled wheat are exempt from duty.

Under the authority granted soon after the commencement of his term by Congress, whereby he was empowered to make changes in the Tariff at any time without submitting such matters to the legislation body, the President has authorized on January 7, 1919 the following changes: The import duty on roll paper for rotary presses was fixed at twelve centavos per kilo, or 2.75 cents American gold per pounds. The export duty on crude tobacco was reduced one-half, being fixed 4.60 cents per pound instead of 9.20 cents. On cotton the export duty was placed at 1.84 cents per pound instead of 0.69 of a cent as heretofore. This was done for the purpose of discouraging exportation and keeping the fibre at home for use in the local factories. The decree prohibiting the exportation of scrap iron during the war was abrogated and an export tax of \$1.50 per metric ton was established. In order to promote the manufacture of soap in the Republic the former tax of 3.45 cents per pound on caustic soda is reduced to 1.15 cents. The free importation of auto trucks, tractors, and all machinery used in the pursuit of agriculture and mining, with the accessories thereto, was continued without payment of duties. Same decree established duty of 3 pesos each on Panama hats.

Another decree of January 7, 1919, imposed a special surtax of 15 per cent. of the respective customs duties on all goods imported or exported by parcel post. Where other surtaxes

are in force, such as the 2 per cent. port tax, they should be calculated on the net amount of the duties excluding the new surtax created by this decree. The new tax came into force on January 15, 1919.

By a ruling of the General Directory of Customs the classification that should be applied to Crisco is, "Stearine of vegetable oils for culinary purposes," and the duties to be levied are to be rated, according to its containers, as follows: Vegetable oils, in tank cars or tank ships, per net kilo, 0.60 peso; vegetable oils, in drums or cans, per 100 gross kilos, 5.50 pesos; vegetable oils, in glass jars, bottles, etc., per legal kilo, 0.25 peso.

A Presidential decree in effect from February 20, 1919 permitted the importation of the following railway supplies into Mexico free of duty; Switch points, iron and steel ties, turntables, iron and steel rails, frogs, and tie plates. The duties thereby remitted amount to 0.03 peso per kilo gross weight, or \$0.68 per 100 pounds.

A presidential decree of February 1919 reduced the export duty on unginned cotton to 0.02 peso per kilo gross weight, effective from February 16. The former export duty on cotton, as fixed by a decree of January 9, 1919, was 0.08 peso per kilo, or \$1.80 per 100 pounds.

In accordance with a presidential decree which went into force April 1, 1919, the export duties on hides were increased to the following rates: Goat and deer skins, 12 per cent. ad valorem; green salted cattle hides, 20 per cent. ad valorem; dry salted cattle hides, 20 per cent. ad valorem; kid skins, 6 per cent. ad valorem; hides and skins not specified above, 15 centavos per kilo gross weight (\$3.44 per 100 pounds).

In accordance with another presidential decree, which became effective April 15, 1919, the import duty on common, unscented laundry soap and Sapolio has been increased to 10 centavos per kilo (\$2.25 per 100 pounds), based on the legal weight.

The government was abrogated the presidential decree which required mining companies exporting gold and silver ore to the United States to reimport 25 per cent. of the refined metal, therefore, free exportation of metals is now permitted.

A presidential decree of June, 1919 decreased the export duty on leaf wrapped tobacco from 4½ cents (United States currency) to 2½ cents per kilo. The duty on exported filler tobacco is 1 cent per kilo instead of 2½ cents. These rates went into effect at once.

The President of Mexico, under date of August 30, 1919 decreed very important reforms in the import and export tariffs.

In view of the fact that there are now two factories producing automobile tires with a stated capacity of more than one hundred per day, the import duties on this commodity have been increased from the former rate of 0.75 peso per kilo to 1 peso. Local factories are not producing solid tires for trucks, and duties have, therefore, been reduced by 0.25 peso per kilo, making the rate under the new ruling, 0.50 peso. Sporting goods which can not be manufactured in Mexico are to be admitted

free of duty, in order to arouse greater interest in out-of-door sports. The import duty on motorcycles is fixed at 1 peso per kilo, legal weight. Velocipedes and bicycles, whatever the number of wheels, without motive power, and spare parts for the same, are dutiable at 0.40 peso per kilo, legal weight; educational material of whatever kind and gymnastic apparatus exempt from duty; parts of wagons and carriages, such as bodies, sets of forward and rear wheels with axle, spare parts not specified, poles, thills, wooden wheels, wheels of wood and iron, painted or varnished, and metal tires, per kilo 0.75 peso; base metals in sheets, gold plated for the manufacture of jewelry, etc., 1.50 pesos per kilo, legal weight; crockery and porcelain, not specified, 0.50 peso per kilo; mineral water, natural or artificial, 0.50 peso per kilo; lard, pure or compound, 0.05 peso per kilo; hogs and sucking pigs, 0.05 peso per kilo, gross weight. The exemption of duties on empty bags of whatever material was rescinded.

SHIPPING.

Shipping in Mexico which suffered greatly during the war, is now recovering quickly. Tonnage entering Mexican ports in 1919 exceeded four million tons.

The national merchant marine is composed of vessels having a total of 40,257 tons. Recently one schooner and a pilot motor boat which had been constructed in the country were launched. The vessels engaged in river navigation represent a total tonnage of 366,726.

The first shipyard in the waters of the Mexican Republic will soon be established, necessary concession having been granted to a company. The shipyard will be installed in the port of Campeche.

The Mexican merchant ship Rafael Miranda was launched in February 1919, in the port of Mazatlan, where it was constructed for a Mexican owner.

The Oriental Steamship Co., a Japanese line, has resumed its bimonthly service between the west coast of Mexico, Central American ports, and San Francisco, Cal.

Since the termination of hostilities there has been a gradual resumption of marine traffic between Europe and the port of Veracruz, beginning with the Spanish Transatlantic Co. and followed closely by the French Transatlantic Co. and the British Leyland Line, the Holland-American Line for regular trips from Rotterdam to Veracruz, touching at Amsterdam and Havana. The Swedish-American-Mexican Line being to start operations from Goteborg, Sweden, to Veracruz, touching at Christiania, Norway, and Havana, Cuba. The Norway-Mexico Gulf Line started operations on July 4, 1919 from Christiania to Veracruz via Havana.

The steamship service of the Cfa. Nacional Naviera del Pacifico, whose operations between the Mexican ports on the Pacific coast had been suspended since July, 1914, was restored in 1919. These ships conduct both a freight and a passenger coastwise business and will call at Manzanillo, Santa Rosalia, Las Peñas, La Paz, Pazatlan, Sinaloa, and San Blas.

This service was operated on the Pacific coast previous to July, 1914, and was entirely of Mexican ownership and management. The cause for its suspension was the requisitioning of the ships by the Constitutional Government for the transportation of supplies and troops necessary for the military campaigns on the Pacific coast at that time.

Prior to the European war, the Japanese vessels that plied between that country and the United States and Mexico touched only at Pacific coast ports. A new service has now been inaugurated, the vessels going directly from Japan to San Francisco, thence to Mexican ports and then to Panama. Passing through the canal, they will then call at Veracruz and Tampico and afterwards proceed to New York, making the return trip in the order named.

Steamship service between the port of San Diego, Calif., and Ensenada, La Paz, Guaymas, Topolobampo, and Mazatlan, has been established.

Liverpool, England, is to have a 15-day steamer service with Tampico, vessels touching en route at Kingston, Jamaica, and Veracruz, Mexico, although it is more than likely that Tampico will be the second port of call instead of Veracruz, as at present. The first steamer arrived at Tampico, March 4, 1919, with general cargo and took away refined lead, cotton, and sisal, all for Liverpool. The cargo was hand stowed, which means that every available bit of space was utilized.

A steamship line connecting San Francisco, Los Angeles, and San Diego, Calif., with Mexican, Central American, and South American ports is about to be established.

The South American Pacific Line, of Canada, has decided to establish direct line of steamers between Canada and Mexico.

The Gulf Navigation Co., has just been organized in New Orleans, which will establish and operate a steamship line between the above named port and Tampico, Veracruz, Progreso, and other Mexican and Central American ports.

A steamship line, recently organized, will soon make trips between Spanish ports and those of Argentina, touching at Veracruz, Tampico, and Havana.

FINANCE.

The government finance were in very good shape before the revolution which started in 1910. For several years a steady surplus had been reported, and the revenues showed continued increase. Mexican securities were quoted abroad above par, and for the first time in the history of Latin American countries, Mexico had been able to borrow under no special guarantee.

The revenues and expenditures in the last three normal years were as follows, figured approximately in American money:

Years	Revenue	Expenditures
1909-10	\$51,171,825	\$48,504,205
1910-11	56,728,510	51,508,145
1911-12	53,697,405	49,503,245

Efforts have been made to reorganize Mexico financially as rapidly as the internal and international conditions permit it. The Mexican government appointed in 1918 a commission called Commission for the Administrative and Financial Reorganization formed by Messrs. Luis Cabrera, Alberto J. Pani, Rafael Nieto, M. Rodríguez and Henry Bruere, very well known in scientific and financial circles in the United States. The commission requested Professor E. W. Kremmerer, of the Princeton University, and Professor Chandler, of the Columbia University, to undertake the study of monetary, tax and other problems. Their reports are most encouraging, and some of the suggestions made by them, including the creation of a Comptrolling office, were carried out.

The national revenues received in 1918 amounted to 149,141,373 pesos Mexican, distributed as follows: Interior taxes, 90,874,696; foreign trade, 37,637,908; taxes on founding, refining, assaying, and coining, 475,664; postal system, 4,375,073; telegraphs, 3,851,853; general treasury of the nation, 1,926,178; and henequen sold to the Reguladora Commission, goods intercepted, consulates, and other sources, 10,000,000, totaling as given above.

The account of actual expenditures of the national treasury shows that in 1918 55,000,000 pesos in round numbers were saved, since the budget provided for expenses of 205,000,000, but the actual expenditures were only 150,000,000 pesos.

The report of the President of the Republic, made to the Mexican Congress on September 1, 1919, contained the following information:

The total revenues received during the 10 months from September 1, 1918, to June 30, 1919, were: Customs—imports, 27,600,000 pesos; exports, 6,450,000 pesos; ports, 1,644,000 pesos; total, 35,694,000 pesos; stamp tax—petroleum, 13,100,000 pesos; metals, 11,900,000 pesos; ordinary stamp taxes, 11,550,000 pesos; Federal contribution, 27,100,000 pesos; other sources, 22,178,000 pesos; total, 85,828,000 pesos; consulates (approximation), 5,000,000 pesos; post offices and telegraphs (approximation), 7,400,000 pesos; nationalized and intervened properties, 730,000 pesos; various receipts, 649,000 pesos; total for 10 months, 135,301,000 pesos.

The total revenues for the year at the above rate were estimated at about 162,000,000 pesos. For the first nine months of the same year the receipts were 18,000,000 pesos more than for the corresponding months of the preceding year; the increase in receipts from the petroleum tax was 4,000,000 pesos, and from tax on metals, 3,000,000 pesos; the custom receipts were 1,800,000 pesos less.

During the fiscal year 1918-19 the embassies, legations and consulates of the Mexican Republic in foreign countries collected for the legalizing of signatures, customhouse manifests, consular invoices, licenses, and the issuance of certificates, the amount of 7,255,316 pesos, against 5,669,390 pesos during the previous year, and 1,148,961 pesos from 1909 to 1910. These collections are far in excess of the budget of the State.

The national expenditures for public administration in the

first four months of 1919 totaled 30,514,840 pesos, distributed as follows: Legislation, 1,187,425 pesos; executive administration, 236,190; judiciary, 221,059; ministry of state, 474,135; foreign relations, 257,897; treasury, 5,212,096; war, 7,458,269; agriculture, 529,513; communications, 1,454,713; industry, 396,676; university department, 391,480; comptrolling department, 441,523; department of sanitation, 223,572; national attorneys' fees, 62,966; supplies, 527,214; and military supplies (quarter-masters' department), 11,340,109 pesos.

Estimated revenue for 1919-20: Import duties, \$40,000,000; export duties, \$8,000,000.00; transit duties, \$36,000.00; other custom taxes, total, \$3,468,500.00; consular fees, \$6,500,000.00; stamp tax, \$15,500,000.00; inheritance tax, \$500,000.00; federal tax, \$32,000,000.00; excise, \$8,000,000.00; tobacco tax, \$5,000,000.00; tax on textiles, \$3,600,000.00; tax on bottled beverages, \$1,000,000.00; tax on matches, \$400,000.00; tax on telephone, \$200,000.00; tax on mortgages, \$350,000.00; charity tax, \$25,000.00; weight and measures, \$20,000.00; patents and marks, \$20,000.00; metals, \$16,000,000.00; mines, \$2,300,000; petroleum, \$12,000,000.00; mint, \$500,000.00; water, \$400,000; posts, \$5,000,000.00; telegraphs, \$4,000,000.00; arsenals and docks, \$10,000; government establishments, \$10,000.00; rents of national lands, \$100,000.00; rents of government buildings, \$1000,000.00; sundries, \$769,000.00. Total, \$167,008,500.00.

A tax has been imposed on alcoholic beverages. Wines, alcohols, liquors, and other beverages must pay a stamp tax, when imported, of 70 per cent. of the amount of the import duties, and foreign beer 80 per cent. of said duties.

By a presidential decree of May 13, 1919, a previous law creating a special tax on all classes of advertisements, was annulled, so that newspaper announcements, theater and commercial signs, etc., are now freed from the tax.

By virtue of a presidential decree of August 30, 1919 all the moving-picture films have been subjected to the payment of a license tax.

A new law of imposts on mining was issued in Mexico City on June 27, 1919 which provides for three classes of taxes: Property tax, imposts on production of metals, taxes on smelting, coinage and assays. The law was made effective July 1, 1919.

Dr. Arthur Young, of Princeton University in his report on the financial situation, finds a "financial problem of the most serious character" confronting the Mexican Government. His report, is part of the extensive investigation of Mexican finances and administrative machinery conducted for the Mexican government by the Comisión de Reorganización Administrativa y Financiera, of which Henry Bruere, former City Chamberlain of New York was the director.

Nevertheless, it is noted that the government of Mexico was proceeding to establish its fiscal affairs on a scientific basis. "This part of the work of the government is little known or understood", writes Mr. Bruere in a foreword to the report. "and should be of gratifying interest to American friends of Mexican progress."

Dr. Young, in his report, finds that the Federal district

comprising the City of Mexico was not self-supporting in the matter of public expenditures before the revolution and has drifted further from that ideal since. In general he recommends a return to the rate of expenditure which obtained in 1910-1911 and a combination and simplification of taxes. He recommends that the number of municipalities in the district be cut down from thirteen to six or seven, that the number of aldermen, for each of these be considerably reduced, and that the present financial organization of the district be changed, to consist of the Governor, as at present appointed by the President; a treasurer, controller, and tax commission.

In his message to Congress, read on September 1, 1919, the President of the Republic, said: "The public finances offer a decisive betterment. In 1917 the deficit was \$35,000,000 more or less; in 1918 it was \$18,000,000, and in the present year the expenses will be totally covered. The time is coming when the Government will begin to pay its debts."

The average Budgets of the different States, which are financially autonomous according to the constitution, are as follows, in normal years, and in Mexican pesos:

	Income Mex. \$	Expenditures Mex. \$
Aguascalientes	445,036.36	375,595.75
Campeche	428,801.16	267,176.45
Chiapas	965,100.78	899,827.15
Chihuahua	2,743,028.91	1,189,672.43
Coahuila	2,451,740.96	926,976.91
Colima	280,525.63	196,821.17
Durango	1,247,160.06	1,347,786.67
Guanajuato	2,464,858.57	1,483,248.64
Guerrero	2,086,886.09	1,875,433.56
Hidalgo	1,912,499.19	1,531,087.28
Jalisco	3,463,009.87	2,860,966.79
Mexico	2,481,904.28	1,573,589.44
Michoacan	1,812,537.16	2,671,981.12
Morelos	657,271.43	513,742.14
Nuevo Leon	1,214,235.71	891,263.59
Puebla	3,045,762.08	1,599,935.71
Queretaro	468,932.08	383,315.45
San Luis Potosi	1,750,139.76	1,409,533.47
Sinaloa	1,531,925.24	448,168.20
Sonora	2,200,451.59	987,815.20
Tabasco	809,777.39	615,166.98
Tamaulipas	1,217,978.61	287,141.76
Tlaxcala	326,996.75	333,066.46
Vera Cruz	5,032,695.69	1,415,405.06
Yucatan	2,716,897.26	3,058,393.23
Zacatecas	1,373,082.04	1,000,203.78
	45,183,235.44	29,643,308.39

Deficits in any year in any of the States are converted into an internal floating debt, payable from the revenue of subsequent years.

DEBT.

The total debt of Mexico, on January 1, 1919, was approximately as follows in American money:

	U. S. \$
Mexican Government:	
Direct External Debt.....	173,469,067
Interest approximated to 1919.....	40,462,129
Direct Internal Debt.....	66,611,012
Interest approximated to 1919.....	14,531,206
Guaranteed Debt (exclusive of Ry. guarantees)...	32,222,690
Interest approximated to 1919.....	7,827,678
Bonded Indebtedness of States (not guaranteed)....	7,049,500
Bonded Indebtedness of Cities (not guaranteed)....	2,549,660
Interest approximated on State Debt to 1919....	1,982,350
Interest approximated on City Debt to 1919....	764,895
National Railways of Mexico:	
Bonded Indebtedness	238,740,393
Interest figured to nearest coupon date, 1919....	51,824,139
Railroads not included in National Railway System:	
Bonded Indebtedness	92,368,685
Interest approximated to 1919.....	20,907,521
Outstanding Government Paper:	
Infalsificables 80,000,000 at 10c.....	8,000,000
Approximate amount borrowed from Banks of Issue	20,000,000
TOTAL DEBT with interest approximated to 1919:	779,120,915

For some time past the department of finance of the Mexican Government has been studying ways and means of renewing the payment of the interest and sinking fund of the national debt, and the subsecretary, in charge of that department went to the United States late in 1919, to discuss this matter with foreign bankers and creditors, with instructions to endeavor to arrange for the conversion of the public debt.

On August 30, 1919, the President of the Republic made operative a law for the reparation for damages caused by the revolution. This law supersedes that of November 24, 1917. In accordance with its provisions a commission will be established in the city of Mexico under the jurisdiction of the department of the treasury to investigate the claims for damages both personal and property, caused by the revolution which took place November 20, 1910. The law provides for the consideration of claims based on damages caused as follows:

1. By the revolutionary forces, or those recognized as such by the government established at the close of the revolution.
2. By the forces of the same government in the exercise of their duties during the struggle against the rebels.
3. By the forces under the old federal army until its dissolution.
4. By outlaws, providing it may be proved that the damage was done as a consequence of the failure of the lawful authorities to afford proper protection.

No indemnity will be allowed in the cases referred to in No. 4 if the damaged person or persons shall have voluntarily given aid or recognition of authority to the rebels, or have shown any desire to aid them against their legal protectors, nor to those who were the authors or accomplices in the crimes against the constitutional government which resulted from the constitutional revolution, and also all those who were well-known enemies of the revolutions of 1910 and 1913 and of the new constitutional government.

As soon as the claims, and proofs accompanying them, shall have been received, the commission will render an opinion as to the award to be made and concerning which the interested parties will be notified so that they may state their acceptance of, or opposition to, such decisions. In the case of claims of foreigners who fail to accept the proposed award, the matter shall be brought to the attention of the President of the Republic for his final decision. The fact of appealing to the commission will act as waiver of all right to bring action through the courts. Foreign claimants who object to the decisions of the commission may present their objections directly to the commission or through diplomatic channels. These objections will then be submitted to the consideration of a commission of arbitration composed of three members, one of whom shall be appointed by the President of the Republic, another by the Diplomatic agent of the country to which the claimant belongs, and a third who shall be chosen by the first two. In the event of failure to agree upon the third member, the President of the Republic is authorized to appoint a citizen from a third nation. No diplomatic or consular agent shall be chosen as one of the arbitrators. The arbitration commission shall have exclusive charge of such cases as they have been appointed to consider, excepting when the President shall have entered into international agreements for the creation of mixed permanent commissions for the investigating of all of the claims of claimants of one and the same country.

The arbitration commission shall reach their decisions through a majority of votes.

The right to bring actions for claims of damages caused by the revolution of November 20, 1910, up to the date of the law, shall become void after the 1st of September, 1920, and a claim for any subsequent damage must be filed within a year of the occurrence.

The form and conditions of such indemnities as may be agreed upon shall be determined by a special law.

The Claims Commission has already received applications made by foreigners, the number of which, as well as the amounts, are as follows, in Mexican money:

33 by Spaniards, amounting to \$8,602,882.79; 15 by Turks, amounting to \$3,434,196.66; 19 by Germans, amounting to \$657,362.54; 2 by French, amounting to \$282,841.32; 2 by Italians, amounting to \$272,497.50; 9 by U. S. citizens, amounting to \$139,914.79; 2 by Chinese, amounting to \$38,662.38; 1 by Guatemalan, amounting to \$20,000.00; 1 by British subject, amounting to \$9,907.25; 1 by Hollander, amounting to \$7,700.00; and 1 by Austrian, amounting to \$3,225.38. Total, \$13,469,100.61.

BANKING.

By the provisions of the law 1897, banks and institutions of credit were divided into three principal classes, based on the particular functions they would be called on to perform: (1), banks of emission, which issued bank notes of given denominations payable at par, on demand, and to bearer; (2), mortgage

banks, which made loans secured by urban or rural estates, and issued bonds secured by the same guaranty, bearing interest and redeemable under stated circumstances and at given times; (3), banks of promotion, which were specially designed to encourage mining, agricultural and industrial enterprises, with the faculty of making preferred loans, unsecured by mortgage, and issuing short-time bonds or certificates running for a certain term and payable on a certain date.

The enactment of this law was followed by a period of economic and commercial development which continued throughout the presidency of Gen. Porfirio Díaz, and in which the banking system of the country played a leading part.

The banks of promotion found a wide field for the development of their business in the way of financing mining and agricultural enterprises, and at the end of the year 1913, the last year for which such statistics are available, the total assets of such banks amounted to over \$83,000,000, divided among six institutions.

In addition to the banks enumerated above there were in active operation at the same time two general banks of deposit, one loan bank for the promotion of agricultural and irrigation enterprises, besides six branches of foreign banks, a number of private banking institutions, and the Monte de Piedad or National Pawnshop under federal control. The latter institution is classed as a bank, inasmuch as it formerly had the faculty of issuing notes and accepting deposits. It is the oldest banking institution in Mexico to-day.

During the revolution, this system of banks, with total assets amounting to about \$600,000,000 built up and established by a prosperous existence of 17 years, suspended operations.

Since 1914, therefore, Mexico has been without banks of any sort within the meaning of the law of 1897. There are at present, it is true, a number of private banking institutions, but their activities are limited almost entirely to the issuance, purchase, and sale of foreign exchange and to commercial credit transactions.

The Treasury Department has issued a statement of the condition of the various banks in the Republic as appeared on Jan. 1, 1919. The institutions included in the report are: The banks of Aguascalientes, Coahuila, Durango, the State of Mexico, Guanajuato, Guerrero, Hidalgo, Jalisco, London and Mexico, Mercantile of Monterrey, Mercantile of Veracruz, Minero of Chihuahua, Morelos, National of Mexico, Nuevo Leon, Occidental of Mexico, Oriental of Mexico, Mexican Peninsular, Queretaro, San Luis Potosi, Sonora, Tabasco, Tamaulipas, and Zacatecas. The total assets and liabilities of the institutions enumerated were as follows on the date mentioned:

Assets	
Capital not exhibited.....	\$ 915,800.00
Cash on hand—Mexican gold.....	227,311.50
Silver dollars (old coinage).....	18,987.00
Fractional silver, etc.....	137,727.94
American gold.....	1,411,045.80
Total	\$ 1,795,072.24

Bills of other banks and of the Government	\$ 4,322,256.55
Shares, bonds, etc.....	43,347,701.22
Loans and discounts.....	22,992,081.22
Loans and pledges.....	7,074,036.83
Loans and mortgages.....	16,393,797.84
Credits on current accounts.....	42,029,448.29
Various debtors	76,399,514.89
Landed properties	18,740,947.10
Furniture and fittings.....	458,300.48
Impersonal debts	70,724,563.93
Loans to the so-called Huerta Government..	51,798,236.26
Loans to the Constitutionalist government..	53,761,702.83

Total \$410,763,459.54

Liabilities	
Capital stock	\$114,025,000.00
Reserve fund	30,038,762.29
Provision fund	11,365,045.16
Deposits on sight	21,319,363.97
Deposits at three days' demand.....	19,455,616.26
Bills in circulation.....	129,984,148.25
Conceded credits	31,830,193.03
Impersonal loans	52,745,330.58

Total \$410,763,459.54

As a result of the liquidations that have been carried out, the commercial paper held by the banks, which in 1918 represented a total of \$1,000,000 pesos in June, 1919, amounted to 77,400,000. There is proportional decrease in the currency in circulation, which decreased from 126,000,000 pesos to 119,000,000 pesos the latter year. The bank deposits also diminished, although the reduction is small, varying from 41,000,000 pesos to 40,000,000 pesos. At the same time the credits which the banks held against the national government have been reduced by nearly 1,000,000 pesos because of the several payments made to the banks. Paper currency retired from circulation, amounting to 94,500,000 pesos, has been burned.

The outstanding notes in circulation of the different banks has been depreciated and the latest quotations in Mexico City are as follows, in Mexican gold:

	Asked	Bid
Querétaro	10	15
Aguascalientes	26	24
Guanajuato	13	11½
Hidalgo	47	46
Peninsular	25	20
Morelos	26	25
Veracruz	46	42½
Occidental	65	55
Guerrero	48	47
San Luis Potosí	37	30
State of Mexico	49	47
Chihuahua	25	19½
Coahuila	23	22
Tamaulipas	35	29
Zacatecas	39	37
Nuevo Leon	75	73
Jalisco	50	46
Oriental	9½	9½
Monterrey	75	73
Sonora	50	46
Tabasco	40	31
Londres	31	29½
National de Mexico	50	47
Durango	30	25

The quotation show an upward tendency.

The Loan Bank for Agriculture and Irrigation (Caja de Préstamos para Obras de Irrigación y Fomento de la Agricultura) was declared a State Institution by decree of June 2, 1918. It has been originally established as a private corporation. Later on, the government acquired the majority of the capital stock and guaranteed foreign loans obtained by the institution.

The new constitution has a provision which forbids the issuance of bank notes by private banks, and provides for the establishment of a single bank of issue, under government control.

In order to carry out this provision of the Constitution, the government made arrangements early in 1919 for the establishment of the bank of issue with funds derived from the monetary commission and with the proceeds of a national subscription. Everything was ready for the establishment of the bank, and the new bank notes were printed in New York. The government, however, did not think the time was propitious for the opening of the bank, and the plan was indefinitely postponed.

In the mean time, the Monetary Commission acted as one of the principal banking institutions.

The Monetary Commission was established by decree of April 3, 1916, and organized on August 30 of the same year. It was originally established for the purpose of regulating the issues of paper money, but when they were abandoned, the commission was authorized to enter openly the banking field as the old banks were in process of liquidation.

It has established branches in Guadalajara, Puebla, San Luis Potosí, Tampico, Veracruz, Monterrey and Torreon.

The following data, contained in a report sent to the Mexican Congress on September 30, 1919, shows the activities of the Monetary Commission:

Movement of Cash.

First half year 1917, \$9,970,097.22; second half year of 1917, \$72,242,925.51; first half year of 1918, \$63,902,930.65; second half year of 1918, 71,839,988.56; first half year of 1919, \$117,914,527.47.

Collections.

First half year of 1917, \$1,385,901.52; second half year of 1917, \$2,677,679.32; first half year of 1918, \$4,171,464.22; second half year of 1918, \$4,893,295.14; first half year in 1919, \$6,258,438.06.

Drafts sold on the United States.

First half year of 1917, \$1,191,881.72; second half year of 1917, \$10,752,080.16; first half year of 1918, \$31,147,469.59; second half year of 1918, \$75,702,081.09; first half year of 1919, \$67,736,827.25.

Domestic Drafts.

First half year of 1917, \$1,340,858.18; second half year of 1917, \$3,586,289.01; first half year of 1918, \$3,759,124.54; second half year of 1918, \$9,346,270.87; first half year of 1919, \$14,400,528.06.

Shipments of cash.

Second half year of 1917, \$5,178,340.00; first half year of 1918, \$4,458,029.00; second half year of 1918, \$4,991,199.32; first half year of 1919, \$8,178,904.02.

The President issued a decree repealing the powers granted to the monetary commission under decree of July 7, 1917, concerning the liquidation of Banks of Issue. The department of finance now has charge of these liquidations.

Due to the efforts of a rich agriculturist of Chiapas, a Farmers' Bank has just been organized, which will devote itself exclusively to making loans to farmers who need funds to work their plantations; thus giving an impetus to the development of national agriculture.

In July, 1919, a branch of the National City Bank of New York was opened in the City of Mexico. This bank also proposed to establish a branch in the city of Vera Cruz.

Norwegian capitalists propose to establish a bank in the City of Mexico, with a branch in the city of Guadalajara, under the name of the Norway and Mexican Banking Co.

Proposed new Banking Law.

In December, 1918, the President submitted to Congress the following draft of a new law governing the organization of banking institutions:

"The President of the Republic, acting in conformity with the General Constitution now in force and taking into consideration the imperative necessity which is being felt throughout the country for the establishment of a banking system that shall normalize and promote economical activities, in such a way as to answer satisfactorily to the high aims of the government, has deemed it necessary to submit to Congress, through the Ministry of Gobernación, the present bill on Credit Institutions.

"Every Banking Institution shall be founded upon the bases that constitute the foundations of the principles of Liberty, combined with the principles of security and guaranty for the public interests, and for this purpose there shall be no monopoly other than that of the Constitutional emission of money-paper, that belongs to the sole Bank of the Republic.

"These Credit Institutions, which are now under formation, shall be denominated as follows: Mortgage, promotion (manufacturing and mining); Agricultural, Petroleum and Deposit Banks.

"A capital of \$500,000 shall be required to found a Deposit or Agricultural Bank and an amount of \$1,000,000 shall be needed to establish a Mortgage or Petroleum Bank. It shall be

absolutely indispensable that any bank have at the moment of its inauguration the sum of money stipulated above as a fund for its establishment, because the actual situation of the country makes the immediate abundance of money difficult.

"It shall be absolutely prohibited to make any penal interest charges to debtors, for this practice, in most cases, only causes a nominal increase of the assets and consequently imposes great hardships upon the debtors in settling their debts. It shall also be forbidden to employ the old methods adopted by the extinct Banks in order to make effective their credits. They must now be subjected to common Legislation in cases of instituting prosecutions against their debtors. Banks shall have no right to attach or confiscate the community lands of the villages, as these lands will always be for common use.

"Mortgage bonds will be received at par by the respective Banks in cases of re-imbursments for mortgage loans; but banks shall not be entitled to give them to the borrower as cash on the loan extended to him, as result of a contract, because the borrower would lose if such bonds are not received at par when he makes a transaction or wishes to exchange or cash them.

"The terms for manufacturing or mining loans shall be limited to a year, but these terms can be extended ad libitum by the Banks, instead of being three years as prescribed by the law of 1894. Consequently the Banks will be in a position to extend the terms at their will and make effective their credits, avoiding thus the risk in case of the insolvency of their debtors.

"For the reciprocal benefit of Bank and debtors, the privilege of preference shall be granted to manufacturing and mining credits, their payments being considered as mortgages in the portion relative to the guaranty of real estate.

"In order to safeguard the public it is provided that any illegal emission of bonds shall be considered a swindle, the responsible persons being subjected to the corresponding penalty for such delinquency."

This bill has been objected to by foreign banking firms, and Congress has not acted upon it yet.

MONEY.

Ever since the early part of the year 1917 the sole circulating medium has been gold and silver. At the time mentioned, the paper that the Constitutionalist Government had issued went out of circulation, while the notes of the various banks, also became uncurrent. The gold and silver coin which had been hoarded during the revolution made its appearance, and while not sufficient to meet the wants of commerce, still enabled business to be carried on though upon a restricted scale. It is estimated that there was at that time upward of \$138,000,000 in coin in the Republic. The mint was at once put in operation. The phenomenal rise in the value of silver, to over \$1 per ounce, produced a puzzling situation. The silver peso, containing nine-tenths of one ounce of pure metal, but with an exchange value of fifty cents or less in American gold, dropped out of sight. The fifty-centavo coin, containing something less than half as much pure metal as

the peso, held on however, and afforded for some time the principal currency resource for commercial transactions.

The Treasury Department began at once the consideration of measures for alleviating the situation so far as lay in its power, and as a result a decree was issued on Oct. 31, 1918, creating new coins as follows: gold pieces of \$2.50, Mex.; with a weigh of 2.083 grammes and 0.900 fineness, and \$2, weighing 1.666 grammes and of the same fineness. The diameter is 15½ millimeters for the first coin and 13 millimeters for the second. The coinage of these new gold pieces commenced on November 10, 1918.

The gold peso, containing 75 centigrammes of pure gold, created by the law of March 25, 1905, continued to represent the theoretical unit of the Mexican monetary system.

The old silver peso was no longer coined, and from the date of this decree was not considered as legal money.

A decree of May 14, 1918, declared all foreign gold coins legal tender at rates to be established by the Department of Finance.

A new gold coin, worth 20 pesos was created by decree of June 27th, 1917.

On October 27, 1919 the President of the Republic issued a decree for coinage of new silver coins of the denominations of 1 peso, 50 and 20 centavos, with a fineness of 720 millesimos of silver and 280 millesimos of copper to be considered merely as fractions of the gold coins. The new copper coin has a value of 10 centavos, a weight of 12 grams, and a composition of 95 per cent. copper, 2.5 per cent tin, and 2.5 per cent. zinc. These coins are restricted legal tender, and their receipt is only obligatory in a single payment of not more than 20 pesos for the silver coins, and 2 pesos for the copper coin. Any person may present any amount of these fractional silver and copper coins to the offices of the treasury for conversion into gold coin, provided the exchange is solicited in amounts of 20 or more pesos. The new coins are received by the State in unlimited quantities in the payment of taxes on a par with gold. The silver coins of the denominations of 1 peso, 50, 20 and 10 centavos issued in accordance with the law of November 13, 1918, continued to have the same legal tender power as was given then under that law while, in the opinion of the President, the conditions for the exchange of fractional coin may so require.

The amounts of gold minted since 1905, are follows, in Mexican dollars:

From October 23, to June 1910, \$88,396,500.00.

From November, 1916, to October, 1918, \$92,770,000.00.

From November, 1918, when gold standard was definitely adopted, to December 31, 1918, \$8,110,000.00.

January to August, 1919, \$21,550,000.00.

Total, \$210,826,500.00.

The silver coins minted during the same periods, were as follows, in Mexican dollars:

From June 5, 1905, to September, 1914, \$64,951,543.30.

From November, 1916, until October, 1918, \$19,461,149.40.

From November, 1918, to December 31, 1918, \$4,430,000.00.

January to August, 1919, \$20,024,000.00.

Total, \$108,866,692.70.

The nickel and bronze coins minted are in Mexican pesos:

First period, nickel 1,600,464.25, bronze, 2,216,916.07; second period, nickel 60,487.45; bronze, 318,000.38; third period bronze, 66,600.00. Total nickel 1,660,951.70. Total bronze, 2,601,515.45.

On October 7, 1919, the treasury fixed the following charges for the minting and reminting of gold coins: Aztecas, 0.5 per cent; hidalgos, 0.6 per cent; half hidalgos, 0.7 per cent; and quarter hidalgos, 0.8 per cent.

The Ministry of Finance and Public Credit published recently a statement showing that during the period from July 10 to October 13, 1919, inclusive, a total of \$50,375,130 pesos in "infalsificable" paper money had been received and destroyed, which added to the amount destroyed previous to July 10, 1919, makes a total of \$397,119,298 pesos which has been retired from circulation.

The total issue of this money amounted to \$515,000,000 pesos, so that there is still outstanding the sum of \$117,880,702 pesos. The method adopted by the Government for recalling this money was the requirement that it should be used in the payment of duties in equal amounts with metallic currency.

The value of one peso "infalsificable" paper is to-day \$0.0765 centavos Mexican metallic currency, and a great part of the balance outstanding is said to be in the hands of speculators.

RAILROADS.

The railroad from Vera Cruz to the City of Mexico was the first line completed in Mexico, and the great period of building activity from 1880 to 1890 saw the completion of the roads most important to the country. In the years from 1890 to 1897 little building was done, followed by five most active years ending with 1902.

In March 1908 a new epoch began in the history of the railroads of Mexico with the constitution of the National Railways of Mexico, with the majority of its stocks owned and vested in the Mexican Government.

The National and the Mexican Central Railroads with their subsidiaries were merged to form the National Railways of Mexico. In subsequent years the National Railways of Mexico obtained control of several other important railroad lines in Mexico, and its present mileage represents over 80 per cent. of the total railroad mileage of the country.

Whilst at the end of 1910 the net surplus of earnings, after all deductions, of The National Railways of Mexico, was \$2,836,569 Mex. gold, the company faced on June 30, 1915, a reported deficit of \$28,909,328 Mex. gold after, the recognized de facto Government undertook the management of the roads.

The following securities were authorized by the new company:

A.—\$225,000,000 U. S. Gold of Prior Lien 4½ per cent. Sinking Fund Redeemable Gold Bonds, maturing on July 1, 1957,

with interest payable semi-annually secured under restrictions set forth in the mortgage to the Central Trust Company of New York, acting as trustee. The mortgage provides for the creation of a cumulative sinking fund which shall be sufficient to retire the entire issue of the bonds by maturity. All instalments so received to be applied by the trustee to the purchase of these bonds at not exceeding 105 and interest; if not so purchaseable, bonds are to be redeemed by lot on interest dates at 105 in amounts of not less than \$10,000,000 face value of bonds. The right was reserved to issue \$6,000,000 additional bonds, of this series to take up at or before maturity the sum of £1,200,000 of prior lien sterling bonds of the Mexican International Railroad Company, or the same amount of Prior Lien 4½ per cent. bonds of the National Railroad Company of Mexico into which such sterling bonds might in the future be refunded.

B.—\$160,000,000 U. S. Gold of Guaranteed General Mortgage 4 per cent Sinking Fund Redeemable Gold Bonds, unconditionally guaranteed as to principal and interest and sinking fund payments by the Republic of Mexico by endorsement. These bonds mature on October 1, 1977, and interest is payable semi-annually, being secured, subject to the prior lien mortgage, to the New York Trust Co., as trustee, under restrictions set forth in the mortgage. Provision is made for a cumulative sinking fund as in the case of the prior lien 4½ % bonds sufficient to retire within the life of the bonds the entire issue of this series; and the manner of its investment by the trustee, and of the redemption by lot, in amounts of \$10,000,000 face value of bonds is likewise stipulated. Under the terms of the mortgage additional bonds of the same rank can be issued to the amount of \$26,000,000 to retire at or before maturity equal amounts of the consolidated mortgage bonds of the Mexican International Railroad Company, or of the Consolidated Mortgage Bonds of the National Railroad Company of Mexico into which such bonds of the International Company might be in the future refunded; or to retire equal amounts of the consolidated mortgage bonds of the National Railroad Company of Mexico into which prior lien bonds of that company might be in the future refunded.

Against its guarantee of these bonds the Mexican Government received: \$6,000,000 prior lien 4½ % Bonds, 2,450,000 guaranteed general mortgage bonds, and 63,730,000 common shares; and it was provided that for any payment it should be called upon to make under the guarantee, the Government was to be deemed a creditor of the New Company for the amount paid, and entitled to repayment with interest at 4% p. a., such repayment, however, to be made only out of net profits remaining after payment of dividends on first and second preferred shares and before any dividend was paid on any other class of shares, the Government ranking in case of liquidation next after the mortgage creditors unless it waived its preference in favor of any other creditors.

C.—\$30,000,000 U. S. Gold (or \$60,000,000 Mexican Gold) Non-Cumulative 4% First Preferred Shares conferring on their holders the right to a dividend up to 4% of their par value from the surplus profits of each year, and before any dividend was paid on any other class of shares—no deficiency, however,

in such dividend, in any year, to be made up from the surplus of subsequent years. In case of liquidation of the New Company, the first preferred shares to be entitled to repayment at par before any distribution was made to holders of any other class of shares. No issue beyond the \$60,000,000 Mexican Gold to be made of First Preferred Shares, and no mortgage or other lien in addition to the prior lien mortgage and the general mortgage (Series A and B) to be constituted on any of the properties embraced in said two mortgages except with the approval of a majority of the first preferred shares at the time outstanding, and by the affirmative vote of the majority of the capital stock of the New Company at a duly convened meeting.

These preferred shares could be retired at par for cash, and the deed of incorporation of the New Company provided the setting aside, as a separate fund, of \$1,800,000 prior lien bonds and \$1,200,000 guaranteed general mortgage bonds (or a sufficient amount from the proceeds of any eventual sale thereof) to assure the payment for the period of three years from January, 1908, of semi-annual dividends of 1% to the holders of first preferred shares, in as far as the profits of the New Company should not be sufficient for that purpose.

D.—\$125,000,000 U. S. Gold (or \$250,000,000 Mexican Gold) Non-Cumulative 5% Second Preferred Shares. These shares conferred on their holders the right to a 5% dividend each year after the 4% dividend on the first preferred shares should have been paid, and before any dividend was paid on the common shares, no deficiency to be made up from the profits of subsequent years. After the payment of such 5% dividend, any surplus profits distributable in dividends in any year, to go to the holders of second preferred and common shares constituting part of the initial capital in proportion to their respective holdings. In case of the liquidation of the New Company, the second preferred are repayable at par after payment at par of the first preferred shares and before any distribution is made to holders of the common shares.

E.—\$75,000,000 U. S. Gold (or \$150,000,000 Mexican Gold) of Common Shares, which constitute part of the initial capital and confer on their holders the right to share in the surplus profits distributable each year after the payment of 4% on the first preferred and 5% on the second preferred shares respectively, as hereinbefore provided. The residue of surplus profits distributable in any year to be divided among the holders of the second preferred and common shares, without regard to class, and in proportion to their respective holdings. No additional issue of common shares beyond the initial \$150,000,000 could participate in dividends, and in case of liquidation of the New Company all common shares were entitled to participation in the assets after payment at par of the first and second preferred shares.

General Provisions:—All bonds, principal and interest were made payable in U. S. Gold, in New York, without deduction for any taxes the company might have been required to pay at the time, or under any future laws of the United States or of the Republic of Mexico, or of any of the political subdivisions of

either. Coupon bonds are at the option of holders payable at the company's office in Mexico or in London, as well as in Germany, Switzerland, France, Holland and Belgium, at fixed equivalents of the dollar. All shares are for \$200 Mexican gold pesos or \$100 U. S. Gold.

The railroad system in operation on Sept. 1st, 1919, date of the latest presidential message, was of 25,711 kilometers. The lines in operation on that date had a total of 13,784 kilometers, as against 11,068 kilometers in the previous year. The lines operated are as follows:

Owned by the Mexican Railway Co., Main Line, Santa Anna to Tlaxcala, Ometusco to Pachuca, Cordoba to Huatusco, Muñoz to Chignahuapam.

Owned by the National Lines of Mexico: Interocéanico, Puebla to Izúcar de Matamoros, San Marcos to Teziutlán, Matamoros to Tlaxiuhquicán, Cuautla to Atencingo, San Nicolás to Virreyes, National of Mexico, Vanegas, Cedral and Matshuala, Michoacán and Pacífico, Salamanca to Jaral del Valle, Rincón to Pozos, Salamanca to San Juan de la Vega, San Lázaro to the San Rafael-Atlixco line, Central R. R., Monterrey and Gulf, Pachuca, Zacualtipán and Tampico, Tula to Pachuca, México to Cuernavaca and Pacífico, Gomez Palacio to San Pedro de las Colonias, Union Mexican, Jiménez to Hidalgo del Parral, Industrial R. R., Coahuila to the Pacific, San Bartolo to Rio Verde, San Pedro de las Colonias to Paredón, Ocotlán to Atotonilco el Alto, Marfil to Guanajuato, Hidalgo R. R., Northwestern, Southern Mexican, Tehuacán to Esperanza, Oaxaca to Tlaxiuhquicán, Agricultural to Oaxaca, San Jerónimo Taviche and San Pedro Huixtepec, International R. R., Coahuila Coal R. R., Rio Escondido Coal R. R., Veracruz to the Isthmus, Veracruz to Boca del Rio. Branches of the Veracruz to the Isthmus Line, Pan-American, Durango to Llano Grande, Cañitas to Durango, Allende, San Carlos and Las Vacas, Penjamo to Ajuno.

Operated by the United Railways of Yucatán: Mérida to Progreso, Mérida to Peto, Peninsular, Mérida to Valladolid and Progreso, Mérida to Izamal, Mérida to Muna.

Operated by the "Cía de Transportes, S. A.": San Juan Bautista to Paso de Carrisal, San Juan Bautista and El Playón, San Juan Bautista to Rio Gonzalez.

Owned by the Toluca, Tenango and San Juan R. R. Co.: Line de San Juan, Linea de Tenango.

Operated by the Coahuila to Zacatecas R. R. Co.; Coahuila and Zacatecas, Avalos to San Pedro Ocampo.

Operated by the "Oro Mining and Railway Co.": Tultenango to Yondésé, Guadalupe to Del Rio.

Operated by the Southern Pacific; Sonora, Sud-Pacífico de México.

Operated by the Veracruz-Mexico R. R. Co., Ltd.; Veracruz to Alvarado, Del Julle to San Juan.

Operated by the Mexico City Tramways Co.: México Tramways, Xochimilco to Puebla, Santa Fé to Toluca.

Operated Independently: Nacional of Tehuantepec, Cía. Constructora Nacional Mexicana, Campeche to Lerma, San Andrés Chalchicomula, Orizaba to Ingenio, Cárdenas to Rio Grijalva, Industrial of Puebla, San Marcos to Huajuapam de León, Northern Mexican, Esperanza to Xúchil, Celaya to Rogue and Santa Cruz, Cazadero to Solís, Western Mexican, Ixtlahuacan to Mafí, Jalapa to Teocelo, Ocarrio, Southwestern of Yucatan, Torres to Minas Prietas and Ures, San Rafael and Atlixco, San Luis Potosí to Rio Verde, Oaxaca to Ejutla, Otumba to Cuautengo, Parral and Durango, Lerddo to Torreón, Mineral of Chihuahua, Nacozañi, Commercial Lines of the Federal District, Piedad Cabadas, Sierra Pinta to San Jorge Bay, Eléctricos of Juárez, Hacienda de Hornos to Viesca, Intercalifornian, El Guarda to Neapanapa, Zitácuaro to Jeconusco, Ixtahuatl, México to Chalco and Rio Frio, Concepción Calpulac to Chachapa, La Viga to Colonia del Rancho, Tijuana to Tecate, Northwest of Mexico, Camargo and Oeste, Tomacoco to Xochitepec, Mexicalzingo to Zapotitlán, Kansas City, Mexico and Orient, San Bartolo to Tenango, Zacatepec, Jojutla

and Tlalquitenango. Pachuca, Zimapam and Tampico, Mexico to Texcoco, Tampico a la Barra, Monte Alto, Acámbaro to Querétaro, Tampico to El Higo, Minatitlán to Carmen, Saltillo and East, Desagué, Quintana Roo.

The gross earnings of the National Lines of Mexico, for the year 1918 were as follows:—Freight, \$29,733,404.17; Passenger, \$21,385,377.89; Express, \$13,799,267.23; Sundries, \$1,124,186.87. Total, \$66,042,236.16.

The gross earnings in first half of 1919 were as follows:

Freight, \$13,812,207.61; Passenger, \$10,712,240.89; Express, \$6,806,763.23; Sundries, \$793,870.17. Total, \$32,125,081.90.

The gross earnings of South Eastern Lines, for 1918 were as follows:—Freight, \$7,761,033.82; Passenger, \$4,678,348.30; Express, \$2,758,365.74; Sundries, \$2,411,457.32. Total, \$17,519,205.18.

The gross earnings of the same lines, in the first half of 1919, were as follows:—Freight, \$3,762,501.30; Passenger, \$2,044,304.52; Express, \$1,316,413.02; Sundries, \$831,946.32. Total, \$7,955,465.16.

The total rolling stock of railways in the Republic is as follows: 1,300 locomotives, 800 passenger cars, and 19,000 freight cars.

The Mexican, Interoceanic, Mexican Southern, Vera Cruz & Alvarado, Vera Cruz & Isthmus, Tehuantepec National, and Pan-American Railway companies were placed under one management on February 1, 1919. One of the announced purposes is to systematize traffic on the competitive Mexican and Interoceanic lines between Mexico City and Vera Cruz. The new system includes all railways south and southeast of Mexico City. Fifty kilometers of the railway under construction between the cities of Durango and Mazatlan have been completed. Work on this road is being actively carried on and it is thought that the entire line will be completed and opened to traffic in a short time.

The Yucatan railways, which until recently used wood as a fuel, have decided to use petroleum on the line from Merida to Progreso. Formerly a locomotive consumed \$30 dollars worth of firewood each trip; while now the journey is made quicker and with an expenditure of but \$7.50 for petroleum.

The Manager of the Vera Cruz Railway has petitioned the Department of Communications and Public Works for authority to extend its Branch line, which runs from Muñoz Station to Chiguahuapam, to the town of Zacatlan, and important agricultural and commercial center of the State of Puebla.

Negotiations are under way on the part of the Government of the State of Coahuila for the construction of a railway connecting Allende, in the northern part of the State, with Villa Acuña. Such a line will open up a rich agricultural region whose development has been hindered by lack of transportation facilities.

Application has been made for a concession to construct an electric interurban railway through the oilfields connecting Tampico and Tuxpan, about 120 miles. A concession has been granted and contract awarded for the construction of a railroad between Toluca and Zitacuaro, about 82 miles. At Toluca the line will

connect with the National railways of Mexico. As a means of affording a transportation outlet for a large tract of virgin timber and to bring about the development of the intervening country, the Mexican Government is constructing a railroad from Saltillo into the mountains, traversing a rich valley region for part of the distance.

Active construction is soon to be commenced on a new railway line from the City of Zacatecas, southwest to the cities of Jerez, Villanueva, and Tlaltenango. The new line will traverse the rich agricultural region which has been retarded in the past by lack of adequate transportation facilities.

The American Smelting and Refining Company is negotiating with the management of the National Railways of Mexico for the construction of a new railway line to be operated in connection with its extensive mines and smelters in the states of Durango and Chihuahua.

A concession has been granted for the construction of a railway from Mexicali, a town on the boundary line between the United States and Mexico, to the Bay of San Felipe in the Gulf of California, a considerable distance south of the Colorado River.

Another important project is the completion of the Southern Pacific Railroad of Mexico so as to constitute a direct connection between the vast system of that company and its connecting roads in the states with the entire west coast of Mexico, including the states of Sonora, Sinaloa, Nayarit, Jalisco and across the Sierra Madre by existing lines to Mexico City. This line was completed from Nogales to Compostela, a point a few miles south of the city of Tepic, before the revolution, and freight and passenger trains were run regularly to the city named. The surveys of the road were directed to San Marcos, in the northwestern portion of the State of Jalisco, which was a temporary terminus of the line that had been built westward from the city of Guadalajara to connect with the line in construction from Nogales.

A concession has been asked to construct a railway line in the district of Caborca, State of Sonora, and connecting with others already in existence.

Application has been made to the Department of Communications and Public Works for permission to construct a branch line connecting the city of Uruapam, in the State of Michoacan, on the National Railway, with that of Los Reyes, on the direct route of Guadalajara. Several branch lines are also projected. The branch will be 170 kilometers long and will open a fertile agricultural section to development.

An American company has asked for permission to construct a line of railway extending from Matamoros directly south to Tampico. It will be in the nature of an extension to the American Gulf Coast lines, which at present have their terminus at Brownsville.

With the object of stimulating the reconstruction of railway systems the President on February 15, 1919 issued a decree declaring the railroad equipment free of duty for a period of six months.

Construction work on that portion of the Kansas City, Mexico and Orient Railway between Falomir, in the State of Chihuahua, and the Rio Grande near Presidio, Texas, has been resumed. Other portion in the hope of completing it to its terminus at Topolobampo, in the State of Sinaloa, on the Gulf of California.

POSTS AND TELEGRAPHS.

The means of telegraphic communication improved remarkably throughout the country during the fiscal year 1918-1919. Fifteen new telegraph offices were opened to the public and the number of messages received and sent totaled 12,102,286. About 1,900 kilometers of new lines; 77,398 kilometers of lines were repaired, and 4,753 other damages corrected. In September, 1919, the total extent of the telegraph system of the Republic was 87,117 kilometers.

Seventy six permits for the construction of private telephone lines were issued.

A modern wireless station was installed at La Paz, Lower California, in substitution of the old one at San José del Cabo, which was destroyed by a cyclone, and one at Tampico was replaced by a new one of greater power.

A powerful station was finished at Chapultepec, D. F., its masts being supported by three iron towers 165 meters high and 12 towers 42 meters high, reaching 15,000 kilometers, equal to any of the best European or American installations. This station gives a daily free news service received by ships navigating on both seas hundreds of kilometers off the shores and also by some South American countries.

A wireless station was also installed in Ixtapalapa which receives messages from all the largest apparatus in the world.

The wireless telegraphic service of Mexico has at present twenty-two stations in use, as follows: Lower California; Baco-chibampo, Sonora, Alamos, Sonora; Mazatlan, Sinaloa; Acapulco, Guerrero; Tampico, Tamps.; Puerto Lobos, Veracruz; Tuxpam, Veracruz; Campeche, Campeche; Merida, Yucatan; Payo Obispo, Quintana Roo; Ixtapalapa, Federal District; Chihuahua, Chihuahua; Torreon, Coahuila; Cordoba, Veracruz; Necaxa, Puebla; Guadalajara, Jalisco; Oaxaca, Oaxaca; Chapultepec, Federal District.

It is proposed to establish stations in addition at La Paz, Lower California; Hermosillo, Sonora; Nogales, Sonora; Juarez, Chihuahua; Matamoros, Tamaulipas; Piedras Negras, Coahuila; as well as at other points.

At the present time direct communication is held between the Chapultepec station and San Salvador, as well as with vessels at the various ports of the east coast.

The post office department has established two new postal services—that of special matter and immediate delivery.

The postal system, which has been extended to 45,605 kilometers last year, has been increased 3,902 kilometers, and there are now 2,463 post offices in the Republic.

On May 1, 1919, a special-delivery service was established for the delivery of letters, corresponding with a similar service that

already exists in the United States and Europe. The cost of this new service is 20 centavos per piece, which is covered by a new series of stamps.

Only ordinary letters and registered packages are handled by this new service.

The movement of postal money orders between the United States and Mexico during the 10 months ended June 30, 1919, reached the large sum of 28,000,000, an increase of about 50 per cent. over the previous 10 months.

This large increase is due partly to the lack of banks in Mexico, to the increased Mexican population in the United States, and to the large mail-order business now being carried on between the two countries.

During the year 1912-13 a total of 106,068 parcel post packages passed through the mails from foreign countries, while during 1918 the total was 277,357 from the United States and 14,545 from foreign countries, of 291,902 all told. The imports from European countries showed a diminution of 91,253 packages as compared with 1912-13, while the imports from the United States showed an increase of 159,498 packages.

The domestic money order business for 1918 amounted to \$17,893,822.73 in orders issued and \$7,499,522.46 in those paid. From June to November the international business amounted to \$134,082.41 in orders issued and \$1,150,386.02 in those paid.

Arrangements are being made with the postal authorities of France, Great Britain, Italy and Japan for the establishment of international money order systems with Mexico, it having been shown that there is need for such a movement on account of the increasing commercial relations therewith.

The Director General of the Postoffice Department, by orders of the President of the Republic, has secured ten postal cars of the latest model from builders in the United States, which will be utilized for the accommodation of the postal service between the border and this city, which has increased to far greater proportions than ever before.

On October 15, 1919, Great Britain renewed its postal money order service with Mexico.

The Post Office Department of Mexico has recently received fifty heavy automobiles from the United States which will be used to replace stage-coaches and mules in various portions of the republic. A number of American motorcycles has also been purchased, which will be utilized in the recently established special delivery system inaugurated in Mexico City and in some other of the larger cities.

During 1918 the postoffice department effected an economy of some \$2,400,000 in the conduct of its business. A considerable portion of this saving was due to the introduction of automobiles for carrying rural mails, in place of slower and more expensive methods of transportation.

Arrangements have been made by the postal authorities of the United States and Mexico whereby packages that for any reason can not be delivered will be forwarded to the exchange offices at the frontier for delivery to the senders upon payment of return postage.

FOREIGN INVESTMENTS.

Large amounts of foreign capital are invested in Mexico. No exact information is available. Estimates made by different investigators are conflicting. The main trouble in making these estimates is that it is very difficult to determine what proportion of the authorized and subscribed capital of foreign enterprises represents actual investment.

Capital invested in enterprises, other than Mining, from 1886 to 1907 is given as follows, in Mexican statistics:

Mexican dollars, 115,304,250; American dollars, 17,257,800; British, in Sterling pounds, 677,400; French, in francs, 1,200,000.

Capital invested in Mining from 1892 to 1907, is estimated as follows:

	Mexican dollars
Mexican	475,509,468
American	676,003,946
British	509,301,645
German	52,492,765
French	32,414,152
Austria-Hungarian	806,400
Spanish	4,743,374
Italian	116,100
Total	1,275,908,382

The following figures, published recently in Mexico City, represent the capitalization of the principal British companies operating in Mexico:

Petroleum Companies

The Corona Oil Company, \$8,000,000; The Agulla Petroleum Co. (Lord Cowdray), \$2,000,000; Oil Fields of Mexico Co., \$20,000,000; Oaxaca Petroleum Co., \$284,249; Panuco Valley Oil Fields, \$140,000; Tampico Panuco Oil Fields, \$1,595,000; Tampico Oil, \$700,000; Tampico Panuco Petroleum Mattschappij, \$800,000; International Mexican Syndicate, \$500,000; Standard Oil of England, 600,000; Standard Oil Company of Mexico, \$110,000; Vera Cruz Mexico Oil Syndicate, \$500,000; West Coast Mexican Oil Co. (capital authorized), \$10,000,000; Amatlan Petroleum Syndicate, \$1,000,000.

Mining Companies.

Esperanza Mining Co. of El Oro, 4,550,000; El Oro Mining and Railway Co., 11,575,000; Mazapil Copper Co. of Zacatecas, 4,224,900; Mexico Mines of El Oro, 1,800,000; Mexican Proprietary Exploration Co. of El Oro, 500,000; Michoacan Railway and Mining Co., 1,053,640; Quintero Mining Co., 520,000; San Francisco Mines of Mexico (Parral, Chih.), 8,500,000; Santa Gertrudis Co. of Pachuca, 15,000,000; Avino Mining Co. of Durango, 1,000,000; Bacis Gold and Silver Mining Co. of Durango, \$484,680; Barranca Mines of Hermosillo, \$1,900,000; Burna Terra Mining Co. of Santa Eulalia, Chih., \$3,300,000; Carmen Mines of El Oro, \$1,200,000; Castellana Consolidated Mining of Navarrit, \$1,000,000; El Mayo Mines of Mexico, State of Sonora, \$1,000,000; Geniza Gold Mines of Chihuahua, \$841,700; El Progreso Mexican Mines of Sinaloa, \$500,000; Esmeralda Consolidated Mines of Nuevo León, \$1,500,000; Exploration Co. of England and Mexico, Chih., \$2,500,000; Guanaceví Co. of Durango, \$2,250,000; Jalisco Mining Syndicate, \$250,000; La Reina de la Plata of Santa Eulalia, Chih., \$400,000; Chiapas Zone Exploration Co., \$2,500,000; Mexican Agency, Ltd.,

\$3,500,000; Mexican Gold and Silver Recovery Co., \$600,000; Mexican Rosario Mining Co., \$500,000; Mexican Smelting Corporation of Coahuila, \$1,500,000; New Ventanas Mining and Exploration Co., 125,000; Mololca Mining Co. of Jalisco, \$125,000; Nolan Gold Mining Co., \$1,010,000; Palmarejo and Mexico Gold Fields Co., \$6,951,270; Rio Grande and Dolores Silver Mining Co., \$1,700,000; San Carlos Gold Mining Co., \$131,340; Santa Rosa Mining Co., \$1,500,000; Taxco Mines of Mexico, \$1,000,000; Tetela Mining Co., 600,000; Tomindl Mining Co., \$2,500,000; Waterson Gold Mining Co., \$116,129; West Mexican Mining and Milling Co., \$5,500,000; Zacatecas Syndicate Mining Co., \$600,000.

Light, Power and Street Railways.

Tnglo-Mexican Electric Co. of Puebla, \$3,000,000; Mexican Light & Power Co., \$79,695,000; Necaxa Electric Plant, \$20,000,000; Mexican Electric Tramway Co., \$10,000,000; Light and Power Co. of Pachuca, 1,000,000; Mexican Northern Power Co., \$12,500,000; Light, Power and Tramway Co. of Monterrey, \$5,000,000; Light, Power and Tramway Co. of Puebla, \$6,500,000; Electric Light, Power and Railway Co. of Vera Cruz, \$600,000; Tampico Electric Light, Power and Railway Co., \$2,500,000; San Luis Potosi Electric Railway Co., \$1,500,000.

Agricultural Companies.

California Land Co. (Lower California), \$2,500,000; Land Company of Chiapas, \$3,150,000; Lower California Development Co., \$3,500,000; Mexican Cotton Estates of Tlahualilo, \$2,500,000; Vera Cruz Land and Cattle Co., \$700,000; Guillo Properties in Oaxaca, \$700,000.

Diverse Industries.

British and Mexican Trust Co., \$5,000,000; Filisola Rubber and Produce Estates, \$1,200,000; Guayule Rubber Co., \$4,000,000; Mansara Exploration Co. (pearl oysters in Lower California), \$250,000; Mexican Fuel and Power Co., \$1,000,000; Mexican Mahogany and Rubber Corporation, \$1,000,000; Pacific Salt Company, \$1,500,000; Salinas of Mexico Co., \$3,250,000; Santa Gertrudis Jute Mill, \$2,000,000; Soconusco Rubber Plantation, \$2,000,000; Aurora Industrial Co., \$1,300,000; Linera Company of Mexico, \$600,000; United Shoe and Leather Co., \$2,234,500; Industrial Soap Company of Laguna, \$5,000,000; Excelsior Lumber Co. of Mexico, \$2,400,000.

Banks, etc.

Canadian Bank of Commerce, \$30,000,000; Bank of Montreal, \$32,000,000; Mexican Mining and Industrial Corporation, \$1,537,500; Insurance Companies, \$6,037,760.

The total amount of British investment, according to the foregoing statement, is upward of \$1,000,000,000 Mexican gold, or \$500,000,000 American gold.

In 1907 the Department of Commerce and Labor of the United States estimated the amount of American capital invested in Mexico at \$750,000,000, two-thirds of it being in railroads. In 1912, Marion Letcher, the Consul at Chihuahua, estimated the total American capital invested in Mexico at \$1,057,770,000; and British capital, at \$321,303,000.

During the fiscal year 1918-19, sixty aliens applied to the Mexican Foreign Department, requesting papers of Mexican citizenship, and 55 certificates were issued.

According to Article 33 of the Constitution 67 foreigners of different nationalities were expelled from the country.

Some 1,656 permits were granted to foreigners to acquire real estate in the Republic, according to the prescriptions of Art. 27 of the Constitution. The detail is as follows:

Germans, 127; United States Citizens, 415; Austrians, 18; Argentinians, 3; Belgians, 6; Cubans, 6; Chinese, 19; Danish, 3; Spaniards, 615; French, 140; Greeks, 3; Guatemaltecos, 1; Hollanders, 13; Hondureans, 7; British Subjects, 83; Italians, 93; Japanese, 2; Turks, 59; Rumanians, 1; Salvadoreans, 3; Sweden, 5; Swiss, 19; Uruguayan, 3; Norwegian, 4; Hungarian, 3. Total, 1,656.

PUBLIC WORKS.

On May 6, 1919, the first automobile stage route in the Republic was opened between Huichapan and Tocoautla, in the State of Hidalgo, a distance of 25 kilometers. The line accommodates both passengers and freight.

The Department of Agriculture and Commerce has decided upon the construction of a port and well-equipped harbor in Espiritu Santo Bay in order to facilitate the exportation of products from the territory of Quintana Roo by the Caribbean Sea.

The department of agriculture and commerce has appointed a committee of engineers to make a detailed study of the waters of the Colorado River with a view to irrigating a large territory in the northern part of Lower California, the fertility of which has been neglected because of the lack of water.

Salvador C. Luque, of Mexico, has obtained a concession granted by the Mexican Government for hydroelectrical purposes at Pachuca. This concession gives the right to the use of 2,000 liters of water per second from a river in the State of Hidalgo.

The transactions of the Public Registry of Property in the city of Mexico for the month of May, 1919, amounted to \$14,789,677.20, being half a million larger than for any previous month of the year. For the first five months of 1918 the total was \$56,837,363.58.

The value of property registered in the federal district during 1919 was 98,932,544 pesos.

The National Government has recently canceled 22,000,000 pesos worth of expired land grants, and will divide the territory among communities which need additional space.

The total amount of the insurance policies carried by all the insurance companies operating in the Republic is distributed as follows: Life insurance, 56,101,498 pesos; accident, 824,000 pesos; fire, 875,446,433 pesos; property risk, such as personal property and real estate, 90,174,141 pesos.

The Department of Agriculture and Development has appropriated funds for the construction of three canals that will divert water from the Yaqui river, in the State of Sonora, and which will be used for the irrigation of the lands of five Indian settlements to which have been allotted tracts for cultivation. It is expected that this will result in the complete pacification of the State named.

A highway has been constructed in Lower California which links the capital of the Northern District with Tijuana and Ensenada. The work cost 1,000,000 pesos.

ECONOMIC CONDITIONS.

Mexico is a country of inexhaustible resources. Despite the long period of revolution and reconstruction, its recuperative

power is marvelous and commercial activity has been resumed, notwithstanding the difficulties caused by the international situation created by the World War.

The economic conditions are improving rapidly, and with a stable government and a better understanding with the United States, the possibilities for the immediate future are tremendous.

In 1919 and the early part of 1920 several groups of American business men visited Mexico and returned to the United States with very optimistic impressions. Despite the troubles caused by the revolution, it is to be noted that American business men dealing with Mexico have sustained comparative insignificant losses in their regular business deals, and had their credits recognized and paid by Mexican merchants.

The internal economic situation has improved steadily, which means an increased purchasing power and an easier commercial situation. Trade is steadily resuming normal conditions.

Data published recently show that the increase in the cost of living in Mexico city from 1914 to September 1918 was, as an average, 116 per cent. This increase, although considerable, is under the average in practically any other country in the world.

PRINCIPAL DEALERS.

The following is a partial list of dealers of imported goods in Mexico.

MEXICO (Distrito Federal.)

Carpets.

E. Caram y Hnos., Av. San Francisco, 55; Sucsa. de Mosler, Bowen y Cook, Av. de S. Francisco, Bolívar y 5 de Mayo; El Palacio de Hierro, S. A., esq. a Ira. del 5 de Febrero; Primitivo Pérez, S. en C., Av. de San Francisco, 68 y 70; San Ildefonso, S. A., 4a. de San Agustín, 103.

Cotton Dealers.

José Armendaris, Ira. de S. Agustín, 19; Murga y Barrios, 4a. S. Agustín, 91; Compañía Agrícola de Tlahuamlo, Ira. de S. Agustín, 19; Compañía Industrial, Ascorve y Gayosso, Av. de Hombres Ilustres, 13; Compañía Industrial de Atlixco, S. A., 3a. de Mesones; Compañía Industrial de Hueyapam, S. en C., 3a. de Aldama, 83; Compañía Industrial, la Aurora, S. A., 4a. de S. Agustín, 103; Fernando Dosal y Co., 3a. de S. Agustín, 77; Evaristo Gestora, Calzada de Guadalupe y Río del Consulado; F. T. Gray, Ira. de S. Agustín, 19.

Automobiles

Pedro Ancino y Co., 4a. Revillagigedo, 51; Ubaldo Bassini, Auto-garage Franco Italiano, 1a. de Bucareli, 10; A. Cazaux, Po. de la Reforma, 131; Zeferino Clement, Ave. de Morelos, 28; Compañía Auto-Taxímetros Mexicanos (S. A.), 5a. de Nuevo Mexico, 106; Compañía Mexicana de Vehículos Eléctricos, Presidente Sesquer; Emilio de los Rios, Delahaye, S. en C., Av. de Hombres Ilustres, 123; Angel Delmotte, Av. Juárez, 4; Maurice Raoul Duval, 4a. de Balderas, 62; Hnos. Forzano, 5a. Gral. Prim, 9.

Notions.

La Barata, José Abdó, 8a. Capuchinas, 147; La Abeja, S. A., 4a. S. Agustín, 90; S. y T. Abid, El Progreso Otomano, Sto. Domingo, 65; M. Alcibar, Las Fabricas de Bilbao, Av. Sta. Isabel la Católica, 5;

Manuel Argumosa, Sucrs., La Nueva Escocesa, 2a. de la Palma, 22; Alejandro Athie, 1a. Merced, 13; Au Carnaval de Venice, 3a. Donceles y 1ra. Santo Domingo; La Perfeccionada, Roca y Bades, S. en C., 3ra. de S. Felipe Neri, 92; José Barreda de la Vega, 5a. Tacuba, 99; Manuel Barrios, El Puerto de Sanlúcar, 5a. S. Juan de Letran.

Women's Tailors.

A. Blancheri, Av. Juarez 77; Crover Bros., Academia, 5; Leopoldo Carpinteyro, 2a. del Chopo, 46; M. Carril e hijo, La Unión Industrial, 5a. de Guerrero, 107; Barroso y Chavez, 4a. del Puente Alvarado, 90 y 92; Adolfo Dueñas Gutiérrez, 1a. de S. Felipe Neri, 18; Juan Fernandez, The New Creation, 1ra. de la Victoria, 4; Agustín Fraustro, Vizcainas, 28; Victoriano Garcia y Hno., 1ra. de Capuchinas, 29; Lucie Giraldon, Frou Frou, Av. Juarez, 32.

Silks.

S. y T. Abbd, El Progreso Otomano, 5a. de Sto. Domingo, 65; Luis Althaud, Seminario, 13; Julio Albert y Co., Sucrs., S. en C., 1ra. del 5 de Febrero, 3 y 5; Alena Alcalá, 4a. de S. Juan de Letran, 53; B. Alphand, Av. de San Francisco, 57; Adela Amestoy, 8a. de Flores, 140; M. Ansó, El Pajarillo de las Flores, 7a. de las Flores, 117; Carlos Arellano y Co., El Paje, Av. de S. Francisco y Monte de Piedad; María Luisa Arteaga, 6a. del Factor, 80; Miguel Alta, Monte de Piedad, 5.

Hats.

Rafael Acosta, Av. 5 de Mayo, 10; Pantaleon Alfaro, Sucrs., Sombrerería Mexicana, 1ra. del Relox, 7; Samuel Arenas, 1a. de Arcos de Belen, 5; Bernabé Arriaga, 1ra. del Relox, 7; Juan Barrera, 7a. de Bolivar, 75; Bernardo Bucher, La Industria Nacional, 1ra. de Sto. Domingo, 15; Felipe Cafiño, La Giralda de Sevilla, 2a. de S. Felipe Neri, 49; Margarita Cercaño, 4a. de San Juan de Letran, 60; Francisco C. de Castillo, 5a. de Manrique, 62; Ignacio Castillo, 6a. de Guerrero, 119.

Perfumery

Angel F. Abogado, Av. Juarez, 4; Alberto D. Aldama, Perfumería Elegante, Av. de Isabel la Católica, 8; Francisco Arocena, Pl. del Carmen, 22; Baeha y Co., Sucrs., El Loubre, A. del 16 de Septiembre, 57; Joransson y Blocklund, Sucrs., Av. del 16 de Septiembre, 26; José E. Bustillos e hijos, 5a. de Tacuba, 78; E. Caram y Hnos., El Cairo, Av. de San Francisco, 56; Luis Castro Galván, S. en C. Av. Isabel la Católica, 32; P. Claverie, Sucrs., La Universal, Av. del 16 de Septiembre, 42; A. Feret y Co., 1a. del F. C. de Cintura, 1.

Watches.

Norberto Aguilera, 9a. de Guerrero, 177; Serapio Aguilera, 6a. de la Estrella, 142; Erasmo C. Alarcón, Sucrs., de Hnos. Esquivel, 1ra. Sto. Domingo, 10; Modesto Aranda, 3a. Amargura, 70; Agapito Arroyo, 4a. de Bolivar, 34; Andrés Becha, jr., 2a. San Lorenzo, 34; H. Bittrolff, Sucrs., 3a. de Bolivar, 28; E. J. Buchetti y Co., Av. Juarez, 77; Benigno Cacho, Av. de los Hombres Ilustres, 5; Trinidad Canchola, 2a. de San Lorenzo, 5-.

Clothes.

Carlos Arellano y Co., El Paje, Empedradillo y Av. S. Francisco; Bernardo Bucher, La Industria Nacional, 1ra. de Sto. Domingo, 15; Compañía Manufacturera de Trajes Sobre Medida, S. A., 4a. de Balderas, 55; Sptaller y Dounadieu, El Lazo Mercantil, 8a. de Capuchinas, 135; Hijos de Max Chauvet, 5a. de Capuchinas y Ocampo; J. B. Ehrard y Co., Sucrs., S. en C., 4a. de Capuchinas y Pte. Diputación; El Nuevo Mundo, S. A., 1ra. del 5 de Febrero y 3a. de Capuchinas; El Palacio de Hierro, S. A., 1ra. del 5 de Febrero y 3a. de Capuchinas; El Puerto de Veracruz, 2a. del 5 de Febrero y 3a. de Capuchinas; Graciano C. Espinosa, 1a. de Sto. Domingo, 13.

Tailors.

Rafael Acosta, Av. 5 de Mayo, 10; Enrique Acuña, 3a. Magnolia, 44; Camilo Aguilar, 1a. del San Agustín, 29; Manuel Aguilar, Seminario, 29; Agustín Alarcón y Co., 1ra. Victoria, 18; Porfirio Alfaro, 5a. calle Ancha, 73; Vidal Alonso y Paredes, 4a. de Tabasco; Ma-laquías Alvarez, 1ra. Sta. María la Redonda, 7; Vicente Alvarez, 2a. San Felipe Neri, 48.

Men's Furnishing.

Agustín Acevedo y Co., 3a. de Manrique 29; Julio Barrera, Royal Club, Av. de S. Francisco, 37; Luis Castro Galvan, Av. de Isabel la Católica, 32; Hijos de Max Chauvet, El Fenix, 2a. de Arquitectos, 65; Hnos. Icaza, La Parisiense, Av. de Isabel la Católica, 17; Villafañe y Martínez, El Fin de Siglo, 5a. de Tacuba, 71; El Palacio de Hierro, S. A., 1a. 5 de Febrero; Emilio Pradal, El Progreso Industrial, 7a. de Sto. Domingo, 87; Godoy y Prado, Sucrs., El Pasaje, Av. del 16 de Septiembre, 63; Feliciano Romano, Pl. del Carmen, 23.

Women's Apparel.

Concepción Aceves, 2a. de Sta. María, 1a. Redonda, 53; Soledad Aguilar, 1a. San Agustín, 6; Hnos. Alhau y Co., Las Fabricas de Francia, 1a. del 5 de Febrero, 6 y 8; Luis Alhau, Al Paraíso, Monte de Piedad, 11; Julio Alber y Co., La Gran Sedería, 1a. del 5 de Febrero, 3; Carlos Arellano y Co., Sucrs., El Paje, S. Francisco y Monte de Piedad; J. B. Audiffred, 1a. Sto. Domingo, 9; Pedro Barauza, Av. de S. Francisco 73; Dolores Barrios, 4a. de S. Juan de Letran, 58; María Basurto, 2a. Galeana, 64.

Furriers.

Isaac Aguilar, 5a. S. Felipe Neri, 131; Juan Altamirano, El Bufalo, 5a. del Factor, 53; Ramón Calleros y Co., 4a. del Factor, 45; Hnos. Cogordan, Sucrs., El Progreso, Calz. de la Viga, 20; Gabriel Chacón, La Hormiga, 3a. de Flamencos, 28; Agustín Delgado e hijos, 1ra. de Sta. Cruz Acalan, 33; Camilo Eyssautier y Hnos., 2a. Flamencos y 4a. San Agustín; Finnigan Export Co., Gorostiza, 2; Vda. de A. Horn, 5a. de Capuchinas, 92.

Machinery.

Compañía Ingeniera Importadora y contratista, S. A., 2a. de Capuchinas, 49; Etablissements Decauville, S. A., 2a. de Capuchinas, 54; Enrique Huber, Av. del 5 de Mayo, 52; Herrmann Sommer y Co., Sucrs., S. en C., 3a. de la Palma 33, 35 y 37; J. M. Zubirán y Co., S. en C., 3a. de Cuauhtemotzin, 77.

Hardware.

Agencia de Comisiones e Importaciones de Ferretería, 2a. del 5 de Febrero, 23; Isaac Alaluf, 1ra. de Manrique 18; Julio Albert y Co., 1ra. del 5 de Febrero, 3; Rafael Anaya, 5a. Correo Mayor; Miguel Arias, Suc., La Perspectiva, 2a. de Atenas, 22; Miguel Atta, Monte de Piedad, 5; Manuel Barrios, 5a. de S. Juan de Letran y esq. de Paredes; Joransson y Bjorklund, Sucrs., Av. 16 de Septiembre, 26; Miguel Bisoyno, 2a. del Dr. Daniel Ruiz, 21; Francisco Campos Rodríguez, La Norma, 5a. Tacuba, 81.

Furniture.

Agencia de Comisiones e Importaciones de Ferretería, 3a. 5 de Febrero, 23; Allen y Co., sucrs., S. A., Av. de S. Francisco, 1; José Almarás, La Pantalla Japonesa, 3a. de S. Lorenzo, 73; José Alvarez Malo, 2a. Donceles, 42; Antonio Amendola, La Ciudad de Nápoles, 2a. de S. Lorenzo, 30 y 37; American Furniture Mfg. Co., Av. 16 del Septiembre, 6; Vda. de Anaya y Ramírez Hnas., 2a. de Donceles, 40; Anton Anton y Sánchez, 2a. de S. Lorenzo, 43; Kaciro Aoyama, 2a. Pte. Alvarez, 37; Juan M. Arias Maldonado, 2a. de Donceles, 46.

Hardware Stores.

Angélica P. Ancillotte, 1ra. del Ayuntamiento, 14; Apollinar de Anda y Co., 3a. de Ramón Guzmán, 1; Dionisio Anda, 3a. de Ramón Guzmán, 118; Miguel Arias, Sucrs., 2a. de Atenas, 23; Carlos A. Ayala, 8a. de Atenas, 56; Salas y Ballina, Pl. de San Juan, 1 y 2; Miguel Bisoyno, 2a. del Dr. Daniel Ruiz, 21; Manuel Briseño, Jr., Av. de Peralvillo, 39; Manuel Cano, Av. de Isabel la Católica, 95.

Jewelry.

Evaristo G. Acosta, Av. S. Francisco, 23; Felipe G. Acosta, 1ra. San Agustín, 22; Jesús D. Ascanto, Av. San Francisco, 47; La Exposición, Assael y Benveniste, Av. San Francisco, 75; Juan Assael, Av. San Francisco, 69; H. Bitroff, Sucrs., 8a. de Bolívar, 28; Pedro Bonnin, 1ra. del Factor, 6; Juan A. Bulilla, 1ra. Sto. Domingo, 4; Francisco Bustamente, Av. de San Francisco, 27; Francisco Bustillo, esq. a 4a. de Bolívar y Pl. del Colegio de Niñas.

Toys.

S. y T. Adib, El Progreso Otomano, 5a. de Sto. Domingo, 63; Isaac Alaluf, 1ra. de Márquez, 18; Manuel Briseño, Av. Peralvillo, 9; F. Campos Rodríguez, La Norma, 5a. Tacuba, 81; Areche y Castañeda, El Palacio de Cristal, Av. Isabel la Católica; Francisco Cilveti y Co., Av. 16 de Septiembre, 66; Pedro Curi, El Gallo, 1ra. Flamencos, 3; P. Domínguez, 6a. de Sto. Domingo, 73; El Progreso Otomano, 5a. de Sto. Domingo, 65.

Books.

Ballesca y Co., Sucrs., Av. del 5 de Mayo, 42; María Barreiro, San Antonio, 4, y Av. de Hombres Ilustres, 49; O. Benziger y Co., 1ra. de S. Juan de Letrán, 10; Society Bible, Av. de Isabel la Católica, 10; W. W. Blake, Av. del 16 de Septiembre, 13; Andres Botas y Miguel, La Exposición Literaria, Vergara, 10; Vda. de Ch. Bouret, Av. del 5 de Mayo, 15; Rafael Cafedo, Av. de Isabel la Católica, 1; Hnos. Francés y Cardona, 5a. Ancha, 74; Enrique García, Seminario, 2.

Glassware.

Al Gran Imperio de Luz, de José Aguirre, Av. del 5 de Mayo; El Puerto de Sanlúcar, Manuel Barrios, S. Juan de Letrán y Peredo; Miguel Bisoyno, 2a. del Dr. Daniel Ruiz, 21; Francisco L. Blanco, La Universal, C. del Monte de Piedad, 5; David Bloch, 1ra. de Sta. Teresa, 12; Manuel Bravo y Co., S. en C., 1ra. de Sta. Teresa, 10; Manuel Briseño, Av. Peralvillo, 9; Compañía Ferretera Mexicana, S. A., Av. del 16 de Septiembre, 60; Enrique Cornejo y Co., S. en C., La Vajilla de Oro, 3a. Donceles; Miguel Crespo, 7a. Felox, 79.

Druggists.

T. Bezanilla y Co., Av. de Hombres Ilustres, 5; R. Boutet e Isherwood, S. en C., Calz. S. Antonio Abad, 78; L. Bravo, S. en C., Cosmopolita, 1ra. de la Acequia y Flamencos; José E. Bustillos e hijos, 5a. de Tacuba, 78; M. Cordero y Co., Farmacia y Drogueria Latina, 3a. de Artes, 52; Gamez y Co., 1ra. Donceles, 16; N. García Collin, 3a. de Guerrero, 74; B. Grisl, Av. 16 de Septiembre, 52; Drogueria de Tacuba, de Agustín Hernández, 5a. Tacuba, 85; Emilio Kentsler, Av. de San Francisco, 21.

Shoes.

La Avilesina, S. A., Av. de Isabel la Católica, 14; Tomás Barro, S. en C., Tacuba, 17; Agustín Briseño, 1ra. de S. Agustín 11 y 16; Manuel Briseño, 1ra. de Cuauhtemotzín, 33; Ramón Caballeros y Co., 4a. del Factor, 45; A. Cisneros e hijos, 5a. de Mesones, 62; James Carey, 1ra. de Dolores, 5; Vleyra y Franco, 5a. de Tacuba, 78; Guillermo Mena Gallardo, 6a. de Vidal Alcocer, 1; Luis Gaona, Av. de Peralvillo, 9.

Haberdashers

Rafael Acosta, Av. 5 de Mayo, 10; Manuel Agreda, 1ra. de Luna, 13; Jesús Alcibar, Av. de Isabel la Católica, 30; Las Fabricas de Bilbao, de M. Alcibar, Av. de Isabel la Católica, 5; La Nueva Escocesa, Sucsa., de Manuel Argumosa, 2a. de la Palma, 22; G. Artime y Co., 1ra. de S. Juan de Letran, 3; Au Carnaval de Venise, 3a. Donceles y 1ra. de Santo Domingo; El Louvre, Bacha y Co., Av. del 16 de Septiembre, 57; José Barreda de la Vega, 5a. de Tacuba, 79; Julio Barreda, Av. de San Francisco, 27.

Importers and Exporters.

Agustín Acevedo y Co., 3a. de Manrique 29; Pablo Alexanderson, 3a. Capuchinos 37; Alexandre Paille, 1a. S. Agustín 19; José Alvarez Sarna, 4a. de S. Felipe Neri 115; Juan Manuel Araujo, 4a. de Bravo 52; Angel Batiz, 1a. de Nuevo México 6; W. von Brandenstein, Av. de Juárez 4; Hnos. Brime, esq. a 5a. Tacuba, y 1a. Av. Isabel la Católica; E. J. Buchetti y Co., Av. de Juárez 77; Louis Buón, 1a. Revillagigedo 8.

PUEBLA.**Men's Furnishings.**

Alejandro Afif, S. Martín 2; Camilo Alvarez y Hnos, S. Martín e Independencia; Caledonio Alvarez, Sto. Domingo; J. Arrión y Landa, "Le Gran Chic" 1a. de Mercaderes 7; Camara y Fanjul, 1a. Sto. Domingo 4; Manuel Gonzalez, "El Centro Mercantil" Ayuntamiento 7; Luis C. Jimenez, Portal Hidalgo 4; Arturo Lederman, "La Bella Jardinera"; Benjamin Lara, Portal Hidalgo 4; Luz Palacios, Echeverría 17; Antonio Roco, Guevara 9; B. Samanlego y Co., Zaragoza 11; Juan N. Sevilla, Independencia y Pasaje; Juan Traslosheros, 2a. Mercaderes 2; Rafael J. Vargas y Hno., 2a. Mercaderes 6.

Importers and Exporters

J. Desdler y Co., 2a. de Mercaderes y Cruces; Enrique N. Domingo, Tecali 13; Gonzalez y Fernandez, Sta. Catalina; Juan Giura, Guevarar 9; Quintín Gomez Conde y Hnos., Hospicio 5; Agustín Romero y Co., San Martín No. 1; Sommer Hermann y Co., Independencia; Lavín Wagner, Independencia 6; Jose A. Veramendi, Miradores 13;

Drugs.

Antonio Aguirre, Corazon de Jesus 2; Daniel Almaran, Sanciprian 5; Jacobo Amezcua, Cerca de Sto Domingo 13; Ansaldúa y Co., Motollina 4; Joaquín Arriola Vargas, Victoria 4; Manuel Azcarraga, Gallo 8; Agustín Baldini, Sta. Clara 8; Mariano Bermudez, S. Agustín 10; María Bustos, Mata 3; JJuan Calderon, Independencia 4; Antonio Campos, Leona Vicario 7; Luis Campos, M. Arista 6; Jose M. Fernandez, aporala y G. Miguelito; Agustín Galindo, Sacristía de la Concepción 4; Hipólito Hernandez, 3a. de Real de San Jose 7; Carlos Hernandez, Cruz de Piedra 10. Joaquín Ibañez, Independencia 8; Manuel Mena, 1a. de San José; Carlos Martínez, Aguacil 2; Manuel Mora y Daza, Horno del Vidrio 2; Eduardo Moreno, Herreros 22; Eugenio Moreno, Aduana Vieja 3; Samuel Palafoú, Meson de Sosa 8; José M. Ramirez, Sanciprian 7; Liborio Ramirez, Obispaño 5; Antonio Tello, Sto. Domingo 15; Filomeno Toledo, Costado de San Agustín 5; Paulino Valencia, San José 8; Manuel Zapata, San Francisco 17.

Hardware.

Dorenberg Petersen y Co., Independencia 3; J. Louvier y Co., M. Arista 7; J. N. O'Farrill, S. Martín 6; Miguel Rosales, San Martín 4.

Jewelry.

Luis Arroyo Mancera, Lafragua 6; Francisco Assael, Pje. del Ayuntamiento 5; Carlos Godínez, 1a. de Sto. Domingo 6; Benigno Guerrero, Santísima 6; Enrique Guerrero, Zaragoza 17; Emilio Maille, Pje. Ayuntamiento 7; Isidoro Nava, Sta. Clara 1; Fructuoso M. Ochoa,

2a. Mercaderes 6; Bonifacio Pedraza, Santísima 11; Federico Perret, 1a. de la Merced 11; Enrique G. Schafer, Zaragoza 3; Benito Sanchez, Sta. Clara 3.

Stationery.

Casarrubias y Co, Lafragua 9; Sotero Cruz Hernández, Infantes 4; Alejo de la Puente, Sagrario 2; Modesto Huerta, Aguacil 5; Vicente A. Mateo, Sagrario e Infanta. Manuel B. Montes de Oca, Sta Clara 4; Benito Pacheco, Cholulo 6; Antonio M. Palacios, Mujeres 4; Jenaro Rodríguez e Hijos, Echevarría 14; Agustín Romero, San Martín 1; David S. Sanchez, Est de Hombres 3.

Furniture.

Hnos. Aguilar, Meson de Santa Teresa 1; Adolfo Larreda, Wat. de Hombres 8; José M. Bastillo, Cholula 15; Miguel Guevara, c. del Muerto; A. Hernández, Ibarra 3; Francisco Havara e hijos, Porfirio Díaz, 12 y 13; Alberto Reneaun Victorio 8; Aurelio Romo, San Pedro 8; Rafael Ruiz, Peñas 1; Antonio Saracibar, 2a. Mercaderes 2;

Novelties.

Ana M. Arronte, Pioje 5; Jeanne Besancon, S. Cristobal 6; Alicia Blanco, Infantes 5; Ricarda Bonilla, Mesones 6; Clotilde Carreno, S. de Castro 4 y 6. Josefa Cedeno, Ramos Arizpe 9. Rosario Garcia, Tambores 16; Concepción Guerra, Doncellas 6; Luz Guerrero, Cholula 9; Dolores Hernández, San Agustín 8; Juana Lozano, Espindola 5; María Madrid, Mesones 20; María Martínez, Herreros 24; Guadalupe Méndez, Concepción 7; Matilde Ramírez, Fuente Belén 12; Petra Rojo, Concepción 3; María Sanchez, Tecali 16; Carlos M. Sevilla, Santa Clara 7; Carolina Velez, Ramos Arizpe 7; Antonio Zambrano, Est. Hombres 2;

Tailors.

Camilo Alvarez y Hno., S Martín 2; American Fashionable Clothing Co., Porfirio Díaz 2 y 4; Antonio Arriaga, Gavito 3; Francisco Ascarate, 3a. de San José 5; Antonio Barbosa, Est. Hombres 15; Donaciano Bolaños, Capuchinas No. 1; Luis G. Castro, Guevara 5; Ranulfo Castro Simon, Dean 6; José de J. Cortes, oración de Jesús 1; Gustavo Chevallier, E. Tamaría 12; Manuel Delgado, Meson Sta Teresa 13; Norberto Domínguez Toledano, Victoria 24; Ramón E. Fonseca, Sta. Clara; Isidoro Galindo, Correo Viejo 2; Miguel García, Molina 1; Domingo Gavilola, Fuenleal 8; Alvarez y Gonzalez, Independencia 7; Manuel Gonzalez, Independencia 20; Ignacio Gutierrez, Alguacil 2; Tomas B. Hernández, Tecali 5; Bienvenido B. Herreros, Zaragoza 23; Jesús Infante Díaz, Sanciprian 5; Antonio Limon, Sagrario 2; Arturo Luyando, Meson de Sosa 3; José Marin, Victoria 13; Porfirio Marquez, 2a. de Sta Teresa 12; Manuel Mejía, Alguacil 10; Julio Palacios, Herreros 12; Manuel Ramírez, Espejo 2; Juan B. Samaniego, Zaragoza 11; Eliseo Sanchez, Est. Mujeres 11; Leopoldo Silva, Est. Mujeres 12; Manuel Suarez, Cholula 14; Miguel G. Vazquez, Mesones 20; Mariano Viltafana, Venado 2.

Hats.

Francisco Benítez, Lafragua 11; Angel C. Cananeo, Cost. San Agustín; Couttilenc y Hnos., 2a. Mercaderes 3; Antonio del A. Gonzalez, Portal de Hidalgo 3; Carlos Hernández e hijo, Portal Hidalgo 3; Rafael Moreno, 2a. Sto. Domingo; Enrique Muñoz, Gallos 2; Nemesio Narvaez e hijos, Arista 5; Cipriano Ramirez, Compañía 15; Liborio Reyes, Portal Hidalgo 7; Rafael Ruiz, Compañía 7; Mariano Toquero, Est. Hombres, 11.

Shoes.

Francisco Aceva, Av. 16 e Septiembre; Alden Shoc Co., Pje del Ayuntamiento; Ana M. Bonilla, Cruz de Piedra 20; Angel Bueno, Comercio 11; Carlos R. Bueno, Cholula 8; Marcos Camara, Aduana Vieja 12; Jesús Casilla, Porfirio Díaz, 11; Excelsior, Miradores 2; Francisco Lezana, c. de los Gallos; Brulio Linares, c. de Zapateros; Manuel Luna, 2a. de Sta. Teresa 10; Luis Mateos, Samuel Osorio, 1a. Sto.

Domingo 6; Manuel Pineda, Porfirio Díaz 9; Luis G. Reynal, S. Martín 2; Alberto Salgado, Port. de Sta. Catarina 17; Antonio Salinas, Cruz de la Piedra; Aurelio Villegas, Porfirio Díaz 1; Enrique Villegas, Merino 6; Cristobal Zenizo, Mesones y Sta. Teresa; Juvencio Zurita, Cost. S. Pero 8.

GUADALAJARA.

Importers and Exporters.

Narciso N. Aceves, Morelos 475 y 477; Campaña Comercial Alemana Mexicana, Donato Guerrero 712; V. García Fuentes, Santuario 271; Federico y Guillermo Lunhart, apart. 129; Hnos. Portillo y Co., P. Sanchez 400; Ignacio F. Sahagun, San Francisco 212; Benito Vargas, Prisciliano Sanchez.

VERACRUZ.

Importers and Exporters.

M. Perroux y Co., B. Suarez 11; Romualdo Ramos, Vicario 6; R. Sierra y Hno., B. Juárez e Independencia; Hnos. Taracena, Vicario y Portal Miranda; Adolfo Hegewisch, Morelos 7; Miguel Aguirre, Zaragoza 49; Felipe Aladro, 5 de Mayo 7; Alvarez y Co., 5 de Mayo 3; Manuel Anitua, Libertad 129; Julian Aragon y Sobrino, Ex-convento de San Agustín; Rafael Arachaga Ceballos, Constitución 7; Beluna y Esrada, 5 de Mayo 56; Francisco Berea, Morelos 19; Alfonso Brosting, Morelos 5; Florencio Burgundes, Independencia 21; Calleja Heamoso y Co., Independencia 7; Tomas Canales, 5 de Mayo 16; J. C. Cuskey, Constitución 1; Cibet y Rostan, Morelos 7; José Cobo, Vicario 11; Evaristo Colina y Hno., 5 de Mayo 20; Compañía Mercantil de Veracruz, Independencia 24; A. Cornejo Basines, Arista 3; Guillermo D'Arta y Co., 5 de Mayo 38; Hnos. Díaz, Emparan 11; M. Daring y Co., Independencia y M. Lerdo; Gomez Allende y Co., 5 de Mayo 33; Hnos. Gomez, 5 e Mayo 29; Ramón Macia y Co., Constitución 5; Ortega Martinez y Co., Morelos 9; R. Marure y Co., 5 de Mayo 7; Hnos. Mestre, Emparan 16; J. J. Miguelena, 5 de Mayo 7; Montero y Rolz, Independencia 22; More y Allengue, Independencia 8; Meyecoun y Rivas, Independencia 9; Ramon Rodriguez, Lerdo 10; Fructuoso Saez, Cos 23; Guillermo Santa Cruz, Morelos 11; Jorge Sempé, Emparan 9; J. M. Valverde, c. B. Juárez; Federico Varela, Emparan 12; R. Varela e hijo, Betancourt 22; Hnos. Vliya, Morelos 11; Hnos. Zaldo y Co., Independencia 38.

MERIDA.

Importers and Exporters.

Ismael González, c. 60, No. 524; Emilio Seijo y Co., c. 65, 474; Manuel Sosa, c. 65, 461; Agustín Vales e hijos, c. 65, 475; Fernando Barbachano Bollo, c. 54, 516; Anastasio Cardeña, c. 65, No. 471; Rafael Cen, c. 65 No. 469; Venancio Cervera e hijos y Co., c. 65, No. 467; Alonso B. Duarte, c. 39, No. 562; Joaquín A. Dueñas, c. 65, No. 526; Arturo Duran Maldonado, Hotel de Ventas, c. 62, No. 295; Alonso Escalante y Co., c. 65, No. 494; Joaquín Espejo Méndez, c. 65, No. 449; Andres Fernandez Montilla, c. 56, No. 508, D.; Enrique Fernandez Alvarez, c. 63 No. 475; Rinaldo Flota, c. 56, No. 520; Alfredo Gamboa, c. 66, No. 508; Luis García y Co., c. 65, No. 466; Manuel Gonzalez, c. 58, No. 517; Abelino Montes, c. 65, No. 489.

NICARAGUA.

Nicaragua, the largest of the Central American Republics, extends over an area of 49,200 square miles (127,428 square kilometers), with a population (estimated on Dec. 31, 1914), of 403,540 or 12.2 per square mile.

Due to the fact that two mountain ranges traverse the entire country, it enjoys a diversity of climate, products, and soil. The fertile plateaus are healthful and pleasant, while the lowlands are hot and tropical.

The proximity of the two oceans together with the mountain ranges modifies the climate of Nicaragua. Summer, on the Atlantic slopes and in the hot lands of the coastal lowlands, begins in January and ends in May, but rain is more or less heavy every month of the year. The prevailing winds are from the northeast, and come laden with moisture from the Atlantic. Although it is cool in the highlands, most of the population of Nicaragua live in the hot lands.

Managua is the capital of the Republic of Nicaragua. It lies on the shores of Lake Managua, slightly elevated above sea level, and has good natural surroundings.

Two famous cities in Nicaragua history are Granada, to the south of Managua, and Leon to the north. Corinto, through which practically all the foreign commerce of this part of the Republic flows, is the chief port on the Pacific, although San Juan del Sur, not far from the border of Costa Rica, is a regular port of call and was the western exit of the Nicaraguan Canal, which at one time was projected. The most important port on the east coast is Bluefields, which is becoming a center for a very large banana industry.

On December 31, 1917, the population of Nicaragua was 746,000. At that time Managua had a population of 41,538 and a rural population of 17,462; Leon an urban population of 73,520 and a rural population of 17,007; and Granada an urban population of 21,133 and a rural of 8,211.

GOVERNMENT.

The legislative power, under the new constitution, which went into effect April 5, 1913, is vested in a Congress composed of two chambers; the Senate and the Chamber of Deputies. Congress meets annually at Managua, the capital, on the 15th of December, and holds 45 ordinary sessions and may be prolonged for five more. Provision is also made for extraordinary sessions upon call of the Executive. Senators and Deputies are

elected directly by the vote of the people, the Departments of the Republic being divided into electoral districts, there being one deputy for each 15,000 inhabitants or fraction above 8,000. One Deputy and one Alternate is elected by each District. Each Department elects one Senator and one Alternate for each two Deputies to which it is entitled. An additional Senator is elected only if the number of Deputies becomes odd. All citizens over the age of 21 are entitled to vote, as are those over 18 years of age who are married, or who can read and write. The Chamber of Deputies is renewed by halves and the Senate by thirds every two years.

The Executive Power is vested in the President of the Republic and a Vice-President; who must be native citizens of Nicaragua, over 30 years of age, and who are elected by direct popular vote, for a term of four years, beginning January 1 after their election. The President cannot be reelected.

The present President is General Emiliano Chamorro. The cabinet of five ministers is composed of the Minister of Government, Justice, Police and Charities, Minister of Foreign Relations and Public Instruction, Minister of the Treasury and Public Credit, Minister of War and Marine, Minister of Fomento (Promotion) and Public Works.

The National Congress elected Representative Salvador Chamorro and Senator Vicente Rapaccioli, respectively, first and second Designates (Vice-Presidents).

MINERAL RESOURCES.

In Nicaragua, gold is the most important mineral mined. A very small amount of copper is produced as a by-product from the smelting of silver ores. Copper has also been located on the Caribbean coast and along the Mico and Escondido of Segovia, but development is almost impossible owing to the rough nature of the country and the lack of means of transportation. Copper exists also in the Departments of Leon, Zelaya, and Matagalpa.

Gold is found in the Pis Pis and other districts. In November 1914, the Tonopah Mining Co., a large American concern, acquired a majority of the \$1,000,000 stock of the Eden Mining Co., controlling 9 square miles in the Pis Pis district. Net average values of ore were reported to be \$13 to \$15 per ton, with mining and milling costs less than \$6 per ton. The electric power is obtained from the Tunkey Transportation & Power Co., which was organized to acquire and operate the power plant, railroad, and river transportation, the entire stock of the latter company to be held by the Eden Mining Co.

In addition to the Eden properties, the Tonopah Mining Co. has acquired 93 per cent. interest in the Tonopah Nicaragua Co., organized to operate the Santa Rita mines, located some 30 miles from the Eden mines.

A British company known as the Nicaragua Development Syndicate, incorporated in 1900, is in control of several of the important mining properties in the Republic, these comprising the San Juan Talpaneca mines. The capitalization of the company

is 14,885 ordinary and 21,112 10 per cent. cumulative preference stock, on which no dividend is being paid. The company has done considerable development work.

The Central American Mines (Ltd.), a British company incorporated in 1913, as a reconstruction of the Oroya Leonesa (Ltd.), holds the Leonesa, La Reina, and Española mines. The capitalization consists of 150,000 shares of 5s. par value, also 35,000 6 per cent. debentures, convertible into stock at par. The mines are said to be extremely rich and to offer excellent opportunities for extensive development. The Oroya Leonesa (Ltd.), which this company succeeded, was registered in Great Britain during the year 1910. A battery of 20 stamps, together with cyanide and slime plants, are owned.

There are a number of gold properties, more or less valuable, some of which are producers. There are also some silver mines, but these are mostly small and of little importance. Mining claims are not difficult to obtain in the Republic and water-power rights are readily granted. A mining claim consists of approximately 12,335 acres, and a moderate monthly rental is payable.

A coal mine is said to have been discovered on the plantation called Las Marias in the Department of Chontales.

Philip H. McKinley, an American engineer has secured the right to carry out geological studies and explorations for the exploitation of petroleum in the Departments of Bluefields, Chontales, and New Segovia, Comarcas de San Juan del Norte, and Cabo de Gracia a Dios, and the Districts of Prinzapolka, Río Grande, and Siquia.

Congress has approved a contract authorizing George Heinsch to prospect for oil and natural gases in Nicaragua and to exploit the same. Denouncements of oil lands are to be made in accordance with the provisions of the Mining Code, and the deposits discovered may be exploited for 90 years. Authority is given to establish refineries in the Republic. The Government is to receive 10 per cent of the gross products extracted during the life of the concession.

Two asphalt deposits in the country, are said to have been found which are considered very rich, one in the vicinity of San Francisco del Carnicero, and the other on the coast of Lago del Granada to the east of the mouth of the Río Tipitapa.

The United States firm, "The Gold Mines Co.," has engaged 20 expert miners from the United States to aid in the exploitation of property held by it in Nicaragua.

AGRICULTURAL PRODUCTS.

Coffee, cabinet woods, rubber, sugar, bananas, tobacco, cotton, cacao, corn, and wheat are the principal sources of wealth, and a number of hides are exported annually.

The Department of Managua is the principal seat of coffee cultivation, having 223 ranches or plantations engaged in the cultivation of 29,978 manzanas of land, planted with 10,799,800

coffee trees, which yield a crop of 67,440 quintales of coffee. A manzana is equivalent to $1\frac{3}{4}$ acres.

It was estimated that the coffee production in 1919 would amount to 300,000 quintals, or 30,000,000 pounds, which quantity, if realized, would exceed that of 1918 by 50,000 quintals, or 5,000,000 pounds.

During 1917, the coffee exports from Nicaragua amounted to 18,542,246 pounds of coffee, valued at \$1,761,607. More than 60 per cent of this was purchased by the United States; the remainder by France, Italy, Spain, in the order named. During 1918 the quantity exported was 25,266,454 pounds, valued at \$2,224,154. All of the 1918 crop, except 1,800 quintals, was taken by the United States.

The European demand for coffee caused a decided change in the Nicaraguan market during 1919 in the first 3 months. London imported 8,915 bags and Havre 45,339 bags, whereas only 8,723 bags of coffee were purchased by the United States.

The increased prices helped effectively in rehabilitating many of the planters and producers of the coffee districts, who suffered reverses owing to the low prices of several succeeding years. Later in the year, a drop occurred in the coffee market, but it has partially recovered at the present time.

Production of sugar during 1919 was not encouraging. Some centrals discovered that the sugar content of the cane was below the standard, due to the lack of rain during the proper season. However, it was estimated that the production in 1919 would equal that of 1918, or approximately 24,000,000 pounds.

In 1918, 137,281 quintals or 13,728,167 pounds of sugar were exported, the value being placed at \$742,067. Mexico imported more than 100,000 quintals of this crop; Canada, 20,000 quintals; Panama and other countries, smaller quantities, very little being taken by the United States.

In 1917, only 64,000 quintals or 6,404,226 pounds valued at \$231,796 were exported. More than two-thirds of this was absorbed by the United States; the remainder by Canada and other countries.

The Government issued a decree to prevent a recurrence of the scarcity of sugar. Each central is required to notify the Minister of Finance daily of its production, and no central or producer of sugar is allowed to export, or sell for export, unless under license from the Minister of Finance. In this way the Government expected to retain a quantity sufficient to meet the public demand. It is estimated that the Nicaraguan public consumes 100,000 quintals of sugar annually.

A sugar mill has just been installed in the Department of Rivas.

A Contract was signed between the Ministry of Industry and Señor Samuel Zemurray, by which the latter agrees to develop sugar-cane cultivation in the land of the Capuzano plantation, bought or rented by him. The privilege is also granted of establish stock farms, cheese factories, butter, and other factories for the utilization of dairy products. He will establish also a steam-

ship service between varios ports of the Republic and Europe; the vessels will call at Playa Grande or any designated port of the Estero Real or Gulf of Fonseca.

According to official data the number of tobacco plants under cultivation in the Republic of Nicaragua is 9,061,706.

The governor of Carazo reports that there are in his department 22,375 mamey trees, yielding 11,187,500 fruits; 29,193 alligator pear trees, producing 5,838,600 pears per annum; 36,49 rose apple trees, yielding 14,587,600 apples; and 9,50 zapote trees from which 2,851,000 of its fruit are gathered annually.

The United Fruit Co. owns about 171,000 acres of unimproved land in Nicaragua. The Atlantic Fruit Co. holds about 125,000 acres of land.

The cuyamel Fruit Co. has laid out large banana plantations on the banks of the Rio Grande, and is exporting the fruit directly to the United States. The employees of the Cuyamel company number 600, and with their families form the town of La Cruz with over 1,000 population.

A national company has begun the production of Peruvian balsam in the mountains of Chontales.

Corozo, ojon, and cohune nuts are found in large quantities in Nicaragua. Ebo (wild Almond), and cedro macho are found also, but to a less extent. None of these are exploited since transportation facilities are lacking, and at the present time, the exploitation would be unprofitable. Castor beans grow well but are not cultivated, being found only in a semiwild state. Coco-nuts, are produced entirely by cultivation, practically all are harvested, and perhaps 80 per cent. of the crop is normally marketed. Very little grading is done, only the very small nuts being rejected, and all shipments are made in bulk.

There are several thousand mahogany tree stumps near Bluefields that could be worked with profit. They range usually from 10 to 12 feet in height and from 3 to 6 feet indiameter, not including the spurs. The spurs are flat and have a nearly uniform thickness of 6 to 8 inches, depending on the size of the tree, and frequently have a length of 8 to 10 feet, with a width of 4 to 6 feet.

These stumps, and especially the spurs attached to them, have a very close and figured grain, thus making them by far the most desirable part of a mahogany tree for manufacturers of high-class furniture.

The Nicaraguan Government has granted a timber concession to Manuel Gutiérrez Pena, an American citizen. The concession covers timber and other lands bounded by the Coco or Wanks River and the Honduran frontier. The concessionaire has not only the right to cut timber for export, but may also extract rosin for shipment abroad. The contract is for 49 years.

The Government has granted for a term of 50 years to Montealegre Seydel the small Aseradores Island, in the Department of Chinandega, for the purpose of raising fine hogs and other blooded animals.

The logging and lumber industry has been formally estab-

lished in the Department of Carazo. A number of Managua merchants, who are practical lumbermen, have gone into that region with the object of buying cabinet woods, which are found in that vicinity in great abundance.

A company has been organized in Maragalpa to engage in the cutting of timber for export. This company proposes to confine its operations to the exploitation of the wooded regions of the Matiguas and Muy Viejo districts, using the Tuma, Bulbul, Jullgua and other rivers which flow into the Rio Grande in transporting the logs to the Atlantic seaboard.

The Nicaraguan Fruit & Steamship Co., (Inc.) which has been doing business in the Republic since 1916, intends to undertake on the Atlantic coast the cultivation of bananas on a large scale.

Under date of March 4, 1919 Congress enacted a law providing for the adjudication of lands to the inhabitants of the Mesquite Reserve.

The National Government signed a contract for the introduction of Filipino abaca plants from the Philippines and the manufacture of the abaca goods and hats.

INDUSTRIES.

Under a law enacted by Congress on February 25, 1919, currents and natural waterfalls capable of producing a greater power than 25 horse power can not be alienated. The executive power, however, may lease same for a stated consideration for a term not to exceed 35 years, provided the lease is approved by congress.

Juan Isidro Gonzalez, one of the wealthiest men in Nicaragua, is about to establish a large sugar plantation and mill near Diriamba, although this section of the country is now devoted to coffee. The Nicaragua Sugar Estates, Limited, at San Antonio are reported to be grinding 1,600 to 2,000 tons of cane a day, with a net result of some 4,500 quintals daily, 1,000 men being employd.

A company has been formed to establish a brewery in Managua, with a capital of 100,000 pesos. The brewery will adjoin the electric plant factory.

The brewery will export its product to other Central American countries.

An American company will shortly establish in Nicaragua a modern plant for preparing woods for export.

The Government recently granted to a Nicaraguan citizen, a 30-year concession in order to fish for tortoise shells, coral, and mother-of-pearl on the Pacific coast of Nicaragua and the islands adjacent thereto. The concessionaire agreed to establish in the country within the next five years one or more factories in which to prepare these products for the market.

Two citizens of Palmira have decided to establish in that place a model tannery and saddlery for the tanning of hides and the manufacture of leather goods.

A Nicaraguan citizen has obtained from the National Government exclusive permission to manufacture safety matches and sweet chewing gum. The concession specifies that said articles

are to be made exclusively from raw materials produced in the country.

The manufacture of powder throughout the country has been prohibited, its production being monopolized by the Government.

About one-half of the cattle produced in Nicaragua are slaughtered and consumed locally. The remainder are exported, chiefly overland, to Costa Rica. Although the cattle industry is not yet sufficiently developed in this country to justify the establishment of a meat-shilling and packing plant, there seems to be no hindrance to its further development to an extent necessary to make such an enterprise profitable.

Cattle are very cheap in Nicaragua, the price at the beginning of 1919 ranging from \$12 to \$15 per head. Beef cattle ready to butcher, after being transported to Bluefields, bring about \$25 to \$30 per head. Native cattle are small, averaging not more than 350 to 400 pounds, net weight, dressed. The crossing of native breeds with good imported stock improves both size and quality.

FOREIGN TRADE.

The foreign trade of Nicaragua was as follows, for ten years, in American money.

Year	Imports	Exports
1907	2,811,257	3,359,510
1908	2,958,878	3,647,984
1909	2,583,257	3,989,428
1910	2,856,305	4,545,022
1911	5,724,695	6,579,414
1912	4,966,820	3,861,516
1913	5,770,006	7,712,047
1914	4,134,323	4,955,050
1915	3,159,215	4,567,200
1916	4,777,595	5,284,860
1917	6,393,068	5,975,256
1918	5,929,803	7,754,940

The foreign trade of Nicaragua was as follows, for ten years, amounted to \$13,684,743, a gain of \$1,316,419 as compared with 1917. There was a decrease in imports of \$463,265 and an increase in exports of \$1,779,684, as shown in the above table.

The chief countries of export were United States, \$6,412,921; Mexico, \$965,977; Panama, \$90,143; and Canada, \$79,850.

The principal articles for export were: Coffee, \$2,249,056, all of except about \$26,000 worth, was exported to the United States; cabinet woods, \$1,431,640, nearly all to the United States. The chief cabinet wood was mahogany, accounting for more than 90 per cent of the total exports. Cedar, guayacan, and genizara accounted for nearly all the remainder. Gold, \$1,245,484, in bars, amalgams, concentrates, precipitates, etc., the total to the United States. Sugar, \$742,077, of which \$642,871 to Mexico, nearly \$80,000 to Canada and about \$19,000 to Panama. Bananas, \$535,042, all to the United States. Hides and skins, \$316,332, all, except less than \$100, to the United States.

There was an increase in the value of coffee exported of nearly one-half million dollars as compared with the preceding year; an increase in the value of cabinet woods, of over \$125,000; in gold, of \$320,000; and in sugar, of over \$500,000. There was a decrease in the value of hides and skins exported, of over \$206,000.

The exports of Mexico, amounting to 12 per cent. of the whole in 1918, was entirely a new trade, and was due to the export of sugar, beans, corn, and lard. The export of corn to Mexico amounted to \$208,969.

The principal countries of import were: United States, \$4,630,457; United Kingdom, \$596,809; France, \$154,324; Chile, \$139,789; and Panama, \$138,559.

The principal imports were: Cotton goods, \$1,580,037, the chief items of which were piece goods, \$1,069,814; of which \$580,694 from the United States, \$165,558 from the United Kingdom; ready-made clothing, \$72,982, practically all from the United States; and thread \$62,708, about two-thirds from the United Kingdom and most of the remainder from the United States. Of the other items under cotton goods, \$180,192 from the United States and \$55,733 from the United Kingdom. Manufacturers of iron and steel, \$709,990, nearly all of which was from the United States. Wheat flour, \$356,705, of which \$139,789 from Chile, \$138,559 from Panama, and \$62,727 from the United States. The flour imports from Chile and Panama, the latter a transit trade, represent the total imports from these two countries. Hides and skins and manufactures, \$358,355, consisting of leather, \$213,194, and boots and shoes, \$130,144, all of which, except less than \$1,000, came from the United States.

The Nicaraguan products imported by the United States in 1918, were as follows:

Animals, including fowls, \$2,494.
 Chemicals: Gums-Chicle, \$2,015; Cocoa, or cacao, crude, \$26,926;
 Coffee, \$2,129,092; Copper, old and clippings, \$6,906; Cotton, unmanufactured, \$9,259.
 Fish: Shrimps, and other shellfish and turtles, \$1,049; Fruits and nuts, \$346,472.
 Hides and skins (except fur skins), raw or uncured, \$525,816.
 India rubber, crude, \$111,199.
 Minerals, crude, \$15,029.
 Sugar-cane, \$88,997; Sponges, \$23.
 Vegetables: Beans and lentils, \$10,703.
 Wood, and manufacturers of, \$1,186,462.

The American goods imported by Nicaragua in 1918, were as follows:

Agricultural implements, \$22,473; Athletic and sporting goods, \$1,386.
 Blacking (including shoe paste, etc.), \$5,069; Brass, and manufacturers of, \$13,677; Breadstuffs, \$198,805; Brooms, \$5,271; Brushes, \$3,754; Buttons, and parts of, \$3,858.
 Candles, \$40,119; Cars, automobiles, and other vehicles, \$47,919; Celluloid, and manufactures of, \$9,293; Cement, hydraulic, \$26,774; Chemicals, drugs, dyes, and medicines, \$239,329; Coal and coke, \$17,927; Coffee, \$7,730; Confectionery, \$8,974; Copper, manufactures of, \$17,318; Cotton, manufactures of, \$1,000,000.
 Earthen, stone, and china ware, \$8,020; Electrical machinery, appliances, and instruments, \$43,157; Explosives, \$71,880.

Fibers, vegetable, manufactures of, \$2,755; Fish, \$31,374; Flavoring extracts and fruit juices, \$4,503; Fruits and nuts, \$20,273; Furniture of metal, \$3,624; Furs and fur skins, \$24; Glass and glassware, \$20,855; Grease, \$12,603; Hats and materials for, \$22,267; India rubber, manufactures of, \$29,650; Instruments, and apparatus for scientific purposes, \$3,505; Iron and steel, \$62,904; Lamps, Chandeliers, etc. (except electric), \$17,237; Lead, and manufactures of, \$2,310; Leather, \$304,629; Lime, 4,717; Matches, \$8,717; Meat and dairy products, \$100,563; Motor boats, \$3,750; Musical instruments and parts of, \$8,576; Naval stores, \$384; Notions, not elsewhere specified, \$6,674; Oilcloth and linoleum, \$5,832; Oils, \$388,904; Paints, pigments, colors, and varnishes, \$31,180; Paper, \$79,281; Paraffin and paraffin wax, \$4,220; Pencils except slate) and pencil leads, \$3,036; Perfumeries, cosmetics, etc., \$27,360; Phonographs, graphophones, etc., and records, and materials for, \$3,940; Photographic goods, \$3,903; Plated ware (except cutlery and jewelry), 3,527; Roofing felt and similar material, \$2,777; Salt, \$8,327; Shoe findings, \$8,267; Silk, manufactures of, \$11,490; Soap, 72,208; Spices, \$2,198; Spirits, wines, malt liquors, and other beverages, \$67,027; Stone, and manufactures of, 2,551; Straw and palm leaf, and manufactures of, \$491; Sugar and molasses, \$4,884; Surgical appliances (not including instruments), \$7,106; Tobacco, \$27,667; Toys, \$4,806; Vegetables, \$82,248; Wax, manufactures of, \$1,671; Wood, \$72,757; Wool, manufactures of, \$17,117; Zinc, \$33,875.

CUSTOM REGULATIONS.

Six copies of consular invoices in Spanish are required for shipments to Nicaragua. They must give the name of the vessel, port of destination, consignee, country of origin, date of shipment, signature of shipper, number of bales, cases, barrels, bundles, etc., that contain the merchandise, also mark and number used to designate each package, its gross and net weight, name and component material of merchandise specified, and value of articles. Erasures of all kinds, vague and ambiguous declarations, or writing between lines are not allowed. The original bills of lading and one copy of each must be presented to the consul for certification. Each package must bear a mark and number and separate consular invoices are required for each mark even when shipped to the same consignee. When merchandise subject to different tariff classification is shipped in one container, each class must be packed or wrapped separately so that its respective weights may be compared with that declared in the invoice.

Certain articles, including dry wins, quinine, certain dried and preserved fruits, leather, shoe materials, surgical instruments, etc., which are admitted from the United States and certain other preferred countries at a reduction of 25 per cent. of the regular duties, require a certificate of origin, made out in Spanish, and it may be issued by a Chamber of Commerce at place of shipment, by a custom or other responsible official. The declaration must be legalized by the consul. Fees for the certification of consular invoices are collected from the consignee by the Administration of the port of entry in Nicaragua; fees for certification for bills of lading must be paid by the shipper at the original port of shipment.

Nicaragua has the following consulates in the United States: Chicago, Ill.; Kansas City, Mo.; Kansas City, Kans.; New Orleans, La.; New York, N. Y.; Norfolk, Va.; Philadelphia, Pa.; St. Louis, Mo.; Sacramento, Cal.; San Francisco, Cal.

The time allowed after arrival by the customhouse for making the entry of goods is 15 days. If the entry is not made within the limited time a fine is imposed equal to 25 per cent. of the duty, if the goods are dutiable; if not dutiable, the fine imposed is equivalent to 25 per cent. of the value of the goods, delivery will not be made to him. Usually the goods are held for six months by the customhouse, after which, under the law, they may be sold at public auction. But if the consignee presents all necessary documents and pays all charges accruing before the time of sale at public auction, he may take delivery of the goods.

The expenses and charges incident to storage by the customhouse are as follows: For each 100 kilos or fraction thereof, $\frac{1}{2}$ per cent. per day for the first 30 days; for the second month, 1 per cent. per day; for the third, and fourth months, $1\frac{1}{2}$ cents per day; and for the fifth and sixth months, $2\frac{1}{2}$ cents per day for each 100 kilos or fraction thereof.

All goods are stored in the customs warehouse till the duties are paid and entry made. In case goods are stored in private warehouses after entry is made, the premium varies from $1\frac{1}{2}$ per cent. to 3 per cent. The insurance and storage charges in such cases are agreed upon by the interested parties.

Goods imported at Corinto are assessed with wharfage charge at \$1.60 per ton. This includes drayage.

In the event of the goods arriving before related documents, if the manifest shows to whom the goods are consigned, the consignee is allowed under sufficient bond to file entry and take delivery of the goods, after making a written promise on the face of the entry to produce the bill of lading and consular invoice, three months from any part of North or South America and five months from other parts of the world. The time to produce these documents may, under unusual circumstances, be extended by the collector general of customs of Nicaragua.

In the absence of documents, if the manifest does not show to whom the goods are consigned, the agents of the vessel on which the goods are imported may have them placed in bond pending receipt of documents; but such agents can not take delivery of the goods. Or the agents of the vessel may make written request to the collector of customs that the person claiming the goods be allowed to place them in bond, which request is granted if the person in question has the necessary bonds on file.

If the bill of lading is not eventually produced the consignee is required to pay a fine equal to the value of the goods. If the consular invoice, when such is required, is not produced a fine of \$1 is imposed in addition to a fine equivalent to 50 per cent. of the duties, if the goods are dutiable. If the goods are not dutiable, then the fine is \$1 in addition to 50 per cent. of the value of the goods.

A consular invoice is required for goods regularly imported or sent by parcel post if they are valued at \$50 or over. In ad-

dition to bills of lading and consular invoice certificates of origin are required in connection with any shipments upon which rebates are allowed.

Examination of imported goods by the drawee is permitted in a limited way. If he has the necessary documents, the customs authorities, being satisfied that he is the owner of the goods will permit him to examine at least one package.

It is impossible for the consignee to obtain possession of goods without bills of lading, whether the bills of lading are made out "to order," or to his order. In order that the shipper may have absolute control of the goods of the bill of lading should be made out "to order" with the necessary instructions to agents or banks in this country.

The desire of the Government of Nicaragua to facilitate commerce with the United States has been shown in many ways during recent years. Among the measures tending to strengthen the friendly relations between the two countries has been the adoption by Nicaragua of a bill-of-lading law patterned on that in force in the United States. Nicaragua has also been the first country to adopt the uniform consular invoice recommended by the International High Commission.

The Government issued recently new regulations for interior shipping on lakes and rivers of the Republic. The right to operate shipping lines will be given only to vessels under the Nicaraguan flag, or to such others as permitted by international treaties or contracts with the Government. The regulations also call for the organization of a body of merchant marine in the principal ports of the national lakes and rivers.

FINANCE.

The finances of Nicaragua have not been in good shape for long time. The revenues declined since 1912, when they reached a maximum of over four and a half million dollars. In 1910, the expenditures exceeded the revenue by nearly three million dollars on account of the revolution which occurred in the previous year. The expenditures were gradually reduced, and in 1915, owing to the financial arrangements with the United States, the national budget has been balanced.

The Budget for 1918 and the Supplementary Estimates approved by Congress on the 6th June, 1918, were as follows, in Nicaraguan money:— Estimated Revenue:— Liquor Revenue, 480,000 Cordobas, Tobacco Revenue, 265,000 Cordobas, Slaughter Tax, 120,000 Cordobas, Stamps and Stamped Paper, 44,000 Cordobas, Telegraph and Telephone Receipts, 53,000 Cordobas, Post Office Receipts, 28,000 Cordobas, State Monopolies, 16,000 Cordobas, Tax and Transfer of Property, 4,000 Cordobas, National Lands, 14,000 Cordobas, Sundry Minor Receipts, 18,000 Cordobas, Customs Revenue 850,000 Cordobas, Direct Tax on Capital, 473,850 Cordobas. Total, 2,385,930.

Estimated Expenditure:—Legislative Power, 28,633 Cordobas, Department of Government, 99,960 Cordobas, Police, 221,844 Cordobas, Justice of Public Charities, 46,451 Cordobas, War and

Marine, 177,137 Cordobas, Finance and Public Credit, 779,979 Cordobas, Internal Development and Public Works, 238,998 Cordobas, Foreign Affairs, 69,139 Cordobas, Public Instruction 149,040 Cordobas, Judicial Power 86,653 Cordobas, Additional Credit at 26,666.66 per month 320,000 Cordobas, Total 2,217,834.

The anticipated surplus of 586,096 cordobas was to be applied preferentially to cover the deficit of 418,000 cordobas, which appeared in the Budget approved in December, 1917, and the balance as follows: 25 per cent, to the amortisation of the 1909 Loan Consolidation Certificates; 25 per cent, to the payment of the 1913 Treasury Cédulas and, when all these were cancelled, to the 1917 Deferred Treasury Cédulas; 50 per cent, to the service of the Guaranteed Customs Bonds; and any surplus then in hand to Public Works.

On January 2, 1919, the President approved the national budget by congress. The budget for 1919 was identical with that passed December 15, 1917, with the additional clause of June 12, 1918, congress reserving the right to make such modifications as may be deemed advisable.

Under a decree of March 3, 1919 congress enacted a law prescribing that the fiscal year be from July 1 to June 30, inclusive, and authorizing the President to make the necessary arrangements with Brown Bros. & Co., J. & W. Seligman & Co., the Corporation of Foreign Bondholders, and the National Bank of Nicaragua for the purpose of making the following changes in the financial plan: That a copy of the budget be delivered to the National Bank of Nicaragua on or before June 1 of each year, and that the surplus be determined once only by reason of this change, within a month from the close of each fiscal year. Said decree also provided that the expense budget of January 2, 1919 would continue in force until December 31, 1919.

For the months of May and June 1919 the National Tax revenue was 344,042 cordobas, of which 109,307 cordobas were collected in May and 234,735 in June.

According to figures of the collector general of customs and direct taxes the revenue from the additional tax of 12½ per cent, on imports in 1919 amounted to 90,000 cordobas and the revenue from the direct tax on capital to 70,000 cordobas.

Mr. Martin Benard was sent to the U. S. as financial agent from the Republic of Nicaragua. The chief purpose of his mission was to negotiate with the banking firm of Brown Bros. & Seligman for the purchase of the 51 shares of the Pacific Railroad and the bonds held by the firm. The agent also was authorized to make arrangements for the construction of the Atlantic Coast Railroad.

DEBT.

The Foreign debt of Nicaragua in January 1919, was as follows; in sterling pounds:

Nicaragua Sterling Loan of 1909—Authorized amount, 1,120,040; Six per cent. Funding Certificates issuable in respect of Coupons due July, 1917, to January, 1920, inclusive, 117,604; Total 1,237,644.

On August 5, 1914, a treaty was signed between Nicaragua and the United States, involving the payment by the latter to the former of \$3,000,000 Gold upon the exchange of ratifications of the Treaty.

In November, 1914, owing to the falling-off in the Customs Receipts, a Law was passed suspending remittances for the Service of the Sterling Loan of 1909 for four months, and extending for one year the payment of the interest and Sinking Fund due 1st January, 1915. As, however, the Revenues showed no improvement, a second Law was passed on 6th March, 1915, approving an Agreement dated 11th February, between the Republic and the New York Bankers, which provided for the extension of the suspension of remittances until 1st July, 1915, and for the payment of the arrears out of the proceeds of the Treaty of August, 1914. This arrangement was carried into effect as far as the partial payment of the Coupon was concerned; but the Government finding itself unable, in consequence of the continuance of adverse conditions, to resume payments on the 1st of July, 1915, a Presidential Resolution was published in August approving a further Agreement with the New York Bankers on 16th July, 1915, providing that the unpaid balance (one fifth) of the January, 1915, Coupon should be paid by the end of that year, with interest thereon at 6 per cent., and that should Nicaragua receive from the United States under the Treaty pending between them the sum of \$3,000,000, the whole interest and Sinking Fund arrears, with interest on the former at 6 per cent. per annum, should be paid thereout.

The stipulation with regard to the payment of the one-fifth of the January, 1915, Coupon was duly carried out.

The Treaty of 5th August, 1914, was finally ratified on 22nd June, 1916, but owing to further negotiations between the United States and Nicaragua, the treaty money was not paid over to Nicaragua.

A settlement of the Debt was arrived at under an Agreement dated 20th October, which was approved by Congress on 15th November, 1917. The principal provisions of this Agreement (which before execution was submitted to the United States Government) were as follows:— The payment in cash, at their full face value, of the four Coupons due July, 1915, to January 1917, with interest at 6 per cent. per annum from their respective due dates to 1st January, 1917; The Payment in cash of the whole of the arrears of Sinking Fund up to 1st January, 1917; The six Coupons due July, 1917, to January, 1920, to be paid as follows: The first two at 25 per cent. in cash; the second two at 30 per cent. in cash; and the third two at 35 per cent. in cash; the balance in each case being payable in Funding Certificates; The Funding Certificates to bear interest at 6 per cent. and to be payable five years, or earlier, from the dates of the Coupons in respect of which they are issued; 25 per cent. of the surplus revenues of the Republic, after providing for the Government's expenses, which are not to exceed 1,460,000 cordobas (\$1,400,000 gold) per annum to be applied to the redemption of the Funding Certificates and, after all such Certificates have been retired, to the payment of any arrears of the Sinking Fund on the 1909

Bonds; Except as above provided, the Sinking Fund on the 1909 Bonds to be suspended until 1st January, 1920; After 1st January 1920, the full service of the Debt to be resumed in accordance with the Agreement of 1912. (For full details of the plan for the financial reorganization of Nicaragua see "Latin American Year Book" for 1919, pages 457 to 461).

The memorandum published by the office of the general customs collection for the period from January 1 to December 31, 1918, gives the following data concerning the settlement of the internal debt: The internal and other floating debts have occasioned many difficulties for the Republic since 1910, preventing the establishment of financial matters upon a firm basis and threatening serious crisis from which the Government has not been able to extricate itself unaided. The plan for the settlement of these debts, paying part in coin and the remainder in long-term interest-bearing bonds, prepared in 1916 by the collector general of the customs, has been put into effect. The total of these debts was 12,884,556 cordobas and was reduced by the commission of public credit to 5,227,536 cordobas, eliminating the excessive interest and arranging payments in relation to the nominal value of the claims. During the year 1918 there were back payments cancelled to the amount of 1,427,536 cordobas, of which 334,840 cordobas were contributed by the funds from the canal convention, and 1,092,695 cordobas were supplied by the director general of the customs from the funds saved during 1916 and 1917 for the external debt of the Republic, as the foreign indebtedness was paid with funds supplied by the canal convention according to the financial program. For the consolidation of the floating debts 3,800,000 cordobas in guaranteed customs bonds were authorized, practically all of which have been issued and recognized by the high commission in charge of the matter.

Payments made out of the surplus from the budget of 1918, were as follows: 75 per cent. of the coupons due July 1, 1917, 102,108 cordobas; 75 per cent. of the coupons due January 1, 1918, 102,108; 70 per cent. of the coupons due January 1, 1919, 95,300. The total of this interest thus extended was reduced consequently to 260,000 cordobas. Deducting the payments made shortly after the 1st of January, 1919, from the funds from the surplus of revenues before mentioned, and applied to the certificates of consolidation, treasury certificates, and guaranteed customs bonds up to the beginning of 1919 the debt of Nicaragua was reduced as follows: Bonds of 1909, sealed, 1,119,060 pounds, or 5,445,905 cordobas; bonds of 1909, not sealed, 930 pounds, or 4,769 cordobas; bonds of 1909, certificates of consolidation, 260,096 cordobas; treasury certificates of 1917, 138,118 cordobas; guaranteed customs bonds, 762,350 cordobas; bonds of 1904, 30,000 cordobas; emergency issue of cordobas (not redeemed), 149,440 cordobas; total 10,054,665 cordobas.

The government has undertaken negotiation for loans with private parties or corporations for the construction of railroads and other public utilities in Nicaragua, under whatever terms and conditions he may deem advisable in order to accomplish his purpose.

BANKING.

The following are the principal banks operating in Nicaragua:

Anglo-Central American Commercial Bank, Ltd. Established in 1914. Head office, Pinners Hall, Austin Friars, London, E. C. Branches in Paris and Managua. Capital, \$276,500.
Commercial Bank of Spanish America, Managua.
Banco Comercial de Nicaragua, Managua.
London Bank of Central America, Ltd. Established in 1888 in Managua under the name of Banco de Nicaragua. Registered in London in 1893. Capital \$137,850.
National Bank of Nicaragua. Established in 1912. Capital \$100,000.

Exports to the United States, as a rule, are financed by drafts drawn against the importer. The draft is generally sold to the local bank, with which the importer has previously arranged for credit. This arrangement for credit is usually made in the United States. Only dollar exchange is handled. Drafts are limited to the amount of credit arranged for. The common usance is 30, 60, and 90 days. The most common way of obtaining ready money is by discounting at the bank, but sometimes drafts are sold to local merchants. The bank's rate of exchange is one-fourth of 1 per cent. for buying and 1 per cent. for selling, and its discount on time drafts is regulated by the local rate of interest for short-time loans; this seldom varies from 1 per cent. per month. Drafts on New York would require eight days' actual time in transit and a draft on San Francisco would require at least 10 days' time for transit.

The common usance of bills of exchange is 30 days; in some instances 60 to 90 days. All bills are negotiated directly. Exchange rates are quoted at so many cordobas for each pound sterling, or \$100, etc. These bills are customarily domiciled in New York, San Francisco, London, and Paris.

Cable advices from New York to the local banks keep them posted on the daily fluctuations of exchange rates in the principal financial centers of the world.

Exchange tables are not necessary, for American money is legal tender, and the cordoba is maintained at par with the American dollar.

Local banks receive quotations of discount rates regularly from New York, but "forward" rates of New York discount are not quoted.

The margin of profit usually calculated in the purchase of first-class commercial bills is dependent upon circumstances. The base for such calculations is the local rate.

In the import trade, the commission for collecting clean bills of exchange, is at least 1 per cent. in the cities of Managua, Leon, and Granada, with a minimum charge of 25 cents; elsewhere in Nicaragua the commission is 1½ per cent., and the minimum, 50 cents.

When collections are returned unpaid or unaccepted the rates are one-half of the above-mentioned rates with the minimum as stated. Such rates include postage charges. The commission for obtaining acceptance, if the bill is not to be left with the local bank for collection, is one-half of the tariff charges.

Ordinarily, local banks do not assume responsibility, or guarantee payment of drafts accepted by approved firms. Exceptions are made in a few cases, in which the importer has arrangements with the banks. For the convenience of clients local banks have what they term, ("Importation Departments;" but consignments are not recommended until after consultation as to whether the class of goods is suitable for the country. The sales commission is generally $2\frac{1}{2}$ per cent.

Local banks do not encourage the sending to them of parcels to be delivered to consignees. It entails too much work, and in such cases the banks have to advance funds for customs purposes, etc. The amounts involved are generally so small that they do no care to undertake business of that class. Banks recommend that parcels be sent against "cash with order." The importer then has to pay the duties and take delivery.

There are no bill stamps or charges for clean and documentary items drawn on Nicaragua, or on checks remitted in payment of foreign collections.

Protest of bills of exchange and drafts in Nicaragua is very rare. Generally it is expensive, depending upon the amount involved, and little is to be gained by undertaking such a measure. Banks recommend it only in rare cases. In the event of a bill being paid after protest it is doubtful whether the charges may be collected from the drawee.

Generally there is difficulty and annoyance when bill of exchange are marked "with all collection and banking charges." Bankers of Nicaragua strongly recommend that these items be included by the shipper in his invoice, and draft upon the importer here be made out for an amount corresponding to the invoice.

BANKING HOLIDAYS.

January 1, New Year's Day—January 6, Epiphany—March 25, Annunciation—April 1, Holy Thursday—April 2, Good Friday—April 3, Holy Saturday—May 13, Ascension Day—June 3, Corpus Christi—June 29, St. Peter and St. Paul—July 4, Anniversary of the Independence of the United States (newly added)—August 15, Independence of Central America—October 12, Columbus or Discovery Day—November 1, All Saints' Day—December 25, Christmas Day.

MONEY.

Prior to 1913 the unit of value in Nicaragua was the sol of Peru. Nicaragua itself minted no coin of a larger denomination than a peseta (\$0.20), but the monetary unit of practically every Latin-American country circulated there.

With the gold standard provided for under the act of March 20, 1912, the new monetary system went into effect March 24, 1913. The new unit of value is the gold "Córdoba", of the same weight and fineness as the gold dollar of the United States.

The córdoba looks very much like any one of the many other silver coins which the country was used to, and to a large majority of the population it has little or no more purchasing power.

The same is true when the American manufacturer undertakes to purchase raw material in Nicaragua.

At the beginning of 1919 the money in circulation in the Republic amounted to 2,960,000 cordobas. In addition to this sum the guarantee fund on deposit in New York on the date mentioned was \$1,300,000.

TRANSPORTATION.

The only line operating in the Republic is the National Railroad of Nicaragua. It covers a comparatively small district in the extreme western portion of the Republic and totals a length of 171 miles; with its several branches. It extends, starting from the port of Corinto on the Pacific coast, in a northwesterly direction for a distance of some 12 miles to the city of Chinandega, and thence southeastwardly to Leon, Managua, Masaya, Granada, and Diriamba. About 20 miles of the southeastern section of this railroad penetrates one of the chief coffee-growing regions.

On the Atlantic coast, near the Rio Grande there are 20 miles of private railways, and on the west side of Lake Nicaragua there are 3 miles of private steam tramways.

Construction has been completed on 11 kilometers of the Northern Highroad connecting Puerto Diaz with the gold section of Juigalpa. In connection with this road the dock of Puerto Diaz, which will be the largest in Nicaragua, is being constructed.

The National Government signed a contract with D. S. Wuescher, the representative of the Wawa Commercial Co., for the construction of a railway which, from a point on the Cucalaya River, follows the course of the Bambana and Oconkues Rivers and terminates in the Pis Pis mining region. The total length of the projected line is 75 miles, but since 40 have already been constructed, only 35 remain for the company to complete. The Cucalaya River is navigable for 10 miles from its mouth to the point from which the railroad will depart, and from Pis Pis to the Atlantic communication is made comparatively easy because the river is navigable for boats of great draft as far as the mining territory. The concessions which the Government is making to the company include the cession of the 40 miles of railway already constructed, a strip of land both sides of the track, and 500 hectares of undeveloped land for every \$20,000 which the company invests in the work.

Official data show that the length of the telegraph system of Nicaragua is 3,637 miles, and that there are 130 telegraph offices in operation. There are 806 miles of telephone wires and 30 stations of that service in the Republic.

The director general of telephone and telegraph lines has ordered the construction of a telephone and telegraph line from Managua to Matagal via Boaco.

Managua, the capital, Leon, Granada, Corinto, Chinandega, and a few other places have electric lighting systems.

The Leon-Matagalpa automobile highway was opened to the public the middle of April, 1919.

Automobile stage service between Diriamba and the port La Boquita, a popular bathing place on the Pacific coast of Nicaragua, has been established.

The Department of Fomento has authorized the expense of \$5,000 for the completion of the highways now being constructed, chiefly from Managua to Matagalpa and from Port Diaz to Bluefields, both of which are expected to be completed in the near future.

The President has ordered the construction of two roads, one connecting Managua with the sea, passing through Santa Ana, and the other to the coffee zone of La Cuchilla in order to transport the coffee cultivated in that region.

The work on the construction of the highway between the Great Lake of Nicaragua and Bluefields has been begun. The first section, the work of the Government, will go direct from the lake to the above-mentioned port; the second section, which belongs to the Bluefields Fruit Steamship Co., will lead to the main establishment on the large agricultural and stock-raising plantations owned by the company.

The building of a wagon road 26 leagues in length between Ocotul, capital of the Department, and San Juan de Limay, has been announced.

The minister of Industry has contracted for the improvement of the National Palace in Managua and the decoration of the salons of the national congress, both works to be completed by the end of 1920.

FOREIGN INVESTMENTS.

The amount of foreign capital invested in Nicaragua has thus far not been large. Great Britain, holding probably more than 1,000,000 of the Government loan and a number of mining properties, has perhaps the largest interests in the field. The United States, with banking, agricultural, mining, and other enterprises, is next in order, while a small amount of German capital has been invested in coffee plantations and other industries.

PRINCIPAL DEALERS.

The following is a list of the principal dealers in Nicaragua:

MANAGUA.

Druggists.

Manuel J. Alvarez, José Luis Arce, Hernán Arguallo, David Campari, Rodolfo Espinosa R., Gustavo C. Lemke, Narciso Luco, Guillermo Martínez, José D. Mayorca, Gonzalo Pérez Alonso.

Jewelers.

Joaquín Arelluegas, Miguel Silva S.

Book-sellers.

Francisco Castro, Hnos. Carrillo, José Andrés García, Carlos Hoberger, Gregorio Matus, Damián Nogués, Rodríguez y García, Lida.

Dry Goods.

Orestes Fondes, José Gomariz

Importers and Exporters.

J. T. Aguirre, Manuel J. Alvarez, Fernando Amplé, Lorenzo Araquistain, Joaquín Arciniegas, Hernán Arguallo, M. Bermudez, F. Brockmann, Luis Cagnoni, David Campari, C. Casso, Atanasio Castro, Victoria de Castro, Alejandro Cortes, Chuan Chon y Co., Jorge Dryfus, J. Elizondo e hijos, Rodolfo Espinosa R., Julio Fernandez, Orestes Fondes, A. Fuentes, L. Gabuardi, G. Gallegos, Jesus Garcia E., José Andres Garcia E., Herman Giebler, José Gomariz, Juan Hastasch, C. Huete, Tompson y Lapens, C. Lacayo, Eugenio Lang, Gustavo C. Lemke, Narciso Lucco, Juana de Marin, Gregorio S. Matos, B. Mejía B., Min Sun Lon y Co., V. M. Mora, Hnos. Morales, Munkel Muller y Co., Fidel Nobili, Domingo Noll, I. de J. Olivares, Cesar Pasos y Hno., Hírillener y Pellas, Hnos. Pentzke, Concepción Perez O., Porfirio Perez N., David Rasteoflay.

Deogracias Rivas, Ruben Rivera Navarro, Rodriguez y Garcia, Ltda., Castillo y Rosales, David Saavedra H., Adan Saenz, Salvador Salgado F., Manuel M. Saralva, Saldina y Selva, Federico Silva, Miguel Silva S., Torres y Co., Maria Uebersezig, Ernesto Valero, Tomas A. Vargas, W. Whelock, Felipe Zapata.

General Merchandise.

Domingo B. Calero, Lara y Callejas, Luis Galenardi, Guillermo Gallegos, Florencio M. Lola, Francisco Palacios, Rosales y Castillo, José M. Toruno, Francisco Uriarte, Wilfredo Wehloch, Ramon Zelaya y Hno., Samuel Zelaya.

LEON.**Importers and Importers.**

Rafael Alvarado, Presentación Aguilera, Guillermo Alaniz, C. Arana, Abelardo Arguello, Benjamin Arguello, David Arguello, Rafael Baca, C. Balladares, Arturo Cahen, S. Cardenal y Co., Trinidad Cardenal, Juan Cascales, F. Castro, J. Castro, Victoria F. de Castro, Club social, Cuadra y Fabri, J. M. Cortes, Luis H. Debayle, R. Deshon, J. Dreyfus, F. Fernandez, H. Florez y Co., Hnos. Gutierrez, A. Herdosa, Diego Herrera, Hon Ong Chon y Co., Hotel Metropolitan Hotel Roma, Pedro B. Icaza, R. Icaza, Labern y Co., Eduardo Lacayo y Co., N. Lacayo, Moncada y Lara, E. Morenco, Dolores Marin, C. A. de Marin, S. Marin, Bosch y Many, Francisco Miranda, Jose Antonio Moltavan, Munkel Muller & Co., D. Nogues y Taulet, Cayetano Otero, Carlos Overend, J. J. Palma, Desiderio Pallais e hijo, T. Pereira, Jose Prio, Quan On Lon y Co., Robelo y Co., Agata Romero, Isaac Saavedra, Hedocla Sacasa, S. Salgado, D. Salinas, Salvador Salinas M., T. Telleria, J. M. Tercero, C. H. Tompson, Dionisio Villa.

BLUEFIELDS.**Importers and Exporters.**

Deverall y Beer, I. Delangers, A. Bernard, Casa Alemana, J. M. Lopez y Co., Humberto Mertinez y Co., Alfonso Navarro, Nicola y Peterson, Quong Chong Co., H. F. Salter y Co., Sam Qell y Co., Sargent Waters, H. F. Springer, Sun Sun y Co., Win Sang Co., Woo Leot y Co., Tay Long, Tay Long Jan.

GRANADA.**Importers and Exporters.**

Francisco Andreta, G. A. Arguello y Co., Antonio Casinelli, E. Castillo, Hnos. Cesar, J. Dryfus, Mariano Estrada, Francisco Herrero, G. Lacayo e hijos, G. Lacayo, Fernando Medina, D. y R. Morales, Juan Dasos, Luis D. Peguet, Horvilleur y Pellas, Pedro R. Vargas, S. Wolff and Co.

PANAMA.

The length of the Republic of Panama is about 480 miles; the width between 37 and 110 miles; total area, 32,380 miles; and population estimated in 1916, excluding the Canal Zone, 450,000.

There are 8 provinces as follows: Bocas del Toro, Coclé, Colón, Chiriquí, Herrera, Los Santos, Panama, Veraguas.

Panama, the capital, founded in 1519, on the Pacific coast, has by the census of 1915, 60,028 inhabitants; and Colón or Aspinwall, on the Atlantic coast, 26,000. On the Pacific, the smaller ports are Agua Dulce, Pedregal, Montijo, and Puerto Mudis. On the Atlantic, Bocas del Toro and Puerto Bello.

A house to house Census taken by the police and fire departments of the Canal Zone between 20 and 30 July, 1918, shows the population of the Zone, including the rural districts and excluding the military and naval forces, to be 21,707 souls, 9,901 of whom are employed. The total number of Americans is 6,690 and of other nationalities, 15,017.

GOVERNMENT.

Panama asserted its independence on November 3, 1903. It was formerly a department of the Republic of Colombia. On November 13 the de facto government was recognized by the Government of the United States and soon afterwards by the other Powers.

The Constitution adopted February 13, 1914, and is now in force, provides for a Chamber of Deputies of 33 members, one for every 10,000 inhabitants, which meets biannually on September 1, and for a President of the Republic, elected for 4 years and not eligible for re-election.

There are three Vice-Presidents and a Cabinet of five ministers. Each of the provinces into which the Republic is divided, is under a Governor.

Dr. Belisario Porras, who filled the unexpired term of late President Dr. Ramon Valdes, resigned from the presidency at the end of 1919, in order to run for the presidential term 1920-24. In the meantime, Ernesto T. Lefevre, who was third Vice-president, took office as President. The election will be held in June and July, 1920.

On December 26, 1918, the law amending the Constitution was published. This law abolishes the death penalty; prescribes that any person may exercise any honest calling or occupation; that the election of President shall be by direct vote; and that, beginning with 1924, elections of deputies shall be held every four years.

A presidential decree was issued July 10, 1919 covering the Naturalization of Aliens. It gives a period of six months from the date of the decree for all the Chinese, Turks, and Syrians who had obtained naturalization papers when not prevented by law to present themselves at the department of foreign relations for identification and to have their finger prints and photographs attached to their letters of naturalization. Copies of the finger prints and photographs will remain with the duplicate letters of naturalization in the archives of the department.

MINERAL RESOURCES.

The mineral wealth of Panama remains still undeveloped. Very little exploration work has been done, and the mineral production is very small yet.

On January 20, 1919 the law concerning concessions for the exploration and exploitation of mineral was promulgated. According to this law the President may make contracts based on the following terms: Exclusive rights for 10 years to explore mines within specified zones; ownership in the mines discovered by the concessionaire, as well as the rights which the present laws concede to the owners of mines in territories adjacent thereto; exemption for a certain number of years from national and municipal taxes; obligation on the part of the nation to issue and maintain in force sanitary rules in the mining zones, and a police force maintained by the concessionaires; the free use of streams and waterfalls; and the regard by the concessionaire of the best interests of the country.

On March 14, 1919, the President signed a contract with A. H. Verrill granting to the latter the exclusive rights of mining exploitations in a territory of 3,000 hectares in the districts of San Francisco and Santiago, the concessionaire agreeing to build at his own expense certain macadamized roads: One from the port of Aguadulce to the district of San Francisco, and one from Puerto Mutis to Santiago.

A United States syndicate which is exploiting a Manganese mine near Portobelo, in the Province of Colon, and which has already exported to the United States more than 20,000 tons of the mineral, is making a minute study of another bed of greater magnitude in the same region.

The property of the Compañía Petrolera de Chorchá was purchased last September by a New York firm, which intends to drill oil wells.

AGRICULTURAL PRODUCTS.

The soil of Panama offers great advantages for the development of agriculture because besides local consumption it has a ready market in the canal Zone where the United States army and employes of the Panama canal take a considerable amount of supplies. The geographical situation of Panama along one of the great world routes, helps the exportation of all native products.

The principal agricultural products of Panama are: Bananas, sugar cane, coffee, corn, cacao, tobacco, rubber, rice, cotton,

yucca, pineapples, potatoes, oranges, and fruits and vegetables in general.

The United Fruit Company owns extensive banana plantations in the province of Bocas del Toro.

The cultivation of bananas, however, is being abandoned for some more profitable enterprises.

During the last months of 1919 coconuts were selling at the highest prices ever known in the Colon market, the prices ranging from \$60 to \$75 a thousand. These high prices stimulated the export business to such an extent that during the quarter ending September 30 the coconuts invoiced for export to the United States amounted to 5,850,913 (in July, 652,765; in August, 2,499,404; and in September, 2,698,744), valued at \$393,932. The number of coconuts exported would have been somewhat larger if shipping accommodations had been afforded. Five years ago the export prices of coconuts at Colon ranged from \$20 to \$22.50 a thousand.

According to reports recently received from Panama, the United Fruit Co. is continuing the plan adopted some time ago concerning the planting of its abandoned banana lands in the Province of Bocas del Toro to coconut groves and cacao plantations. It is estimated that the company has at present 45,600 coconut trees planted on 912 acres of land. Most of these are young trees and will not come into bearing for four or five years. This same company is reported to have cacao plants and trees to the number of nearly 3,000,000 set out over an area of about 7,000 acres. A number of other persons, principally Americans, are engaged in this industry in Panama at Cocoplum Point, about 100 miles west of Colon. These interests have about 95,000 young plants set out and some 5,000 trees in bearing. It is estimated that when all of the coconut trees and plants cultivated in this section of Panama come into full bearing that coconuts by the millions will be available for export from Colon.

The Government has granted Henry DeJan permit to exploit for five years in the national lands of the Province of Bocas del Toro the milk or sap of the "zapote" tree with the object of manufacturing chewing gum. The concessionaire agrees to use scientific processes in carrying on this industry so as not to destroy the trees tapped, and furthermore binds himself to pay the Government of Panama one centavo per pound of product obtained.

By a law of March 7, 1919, the national assembly authorized the President to appropriate a sum not to exceed \$100,000 for the establishment of agricultural colonies of Caucasian immigrants, preferably from the Canary Islands or Puerto Rico.

Panama presents a very favorable field for the growing of coffee, and there is quite a colony of foreigners, mostly Americans, in the district of Boquete, Province of Chiriqui, engaged in the industry; but the coffee lands of Boquete are limited and nearly all the good land is occupied. The best district for the raising of coffee is in the district of Bugaba, where vast areas of the very best lands for coffee growing exist and where climatic and other conditions are most favorable to its growth.

Coffee from this section is classified among the best in the world's market. Grown at an elevation of from 2,000 to 5,000

feet, it not only reaches perfection, but the altitude provides a healthy, cool, salubrious climate which can not be excelled, the temperature ranging from 60 to 75° F. the year around.

Boquete is the terminal for the national railroad, and Concepcion, the capital of the Bugaba district, is the terminal of a branch of the same railroad which provides transportation to the port of David, whence all products are shipped to Panama City by boats running on a trimonthly schedule. The method of cultivation is the same as in any other part of tropical America.

Coffee in Panama matures from October to January.

The annual output of the Province of Chiriqui, which produces the bulk of the coffee, is approximately 4,000 sacks of 100 pounds each.

Labor is plentiful and is paid at the rate of \$1 per day. Most of the work is done by task or contract. The cost of bringing a coffee plantation into bearing is about 70 cents per tree, and it is then valued at \$1. This cost includes land, cleaning, felling timber, nursery, transplanting, and care. Most of the timber may be used for lumber, which commands a good price, as well as for the construction of all buildings. Cash crops may be planted between the trees the first two years. The climate is exceptionally healthful and the soil will produce anything planted, products of the temperate and torrid zones thriving side by side. In good soil 400 trees may be planted to the acre. The yearly cost of maintenance is about \$10 per acre.

Panama is rich in timber and cabinet woods. The Smithsonian institute of Washington sent Professor Henry Pitier, of the Bureau of Plant Industry to make a survey of the forestal resources of Panama. While his work was not complete, he identified and classified one hundred and twenty species of cabinet woods.

INDUSTRIES.

Panama has to depend of foreign countries for practically all manufactured articles, all of which are imported. Local conditions, however, are such that a large number of these articles could be produced in the country, if only capital and enterprise were used.

An American company is constructing a two-story reinforced concrete building in the city of Colon preparatory to the installation of a coconut and palm oil factory in which glycerine, caustic potash, carbonated potash, soda, etc., will be manufactured also. The producing capacity will be 1,500 gallons of coconut oil and 200 of palm oil daily.

A considerable increase of the sugar business is reported in Panama; new companies have been lately organized in different parts of the country to raise cane and manufacture sugar on a large scale. One of the newly organized companies is the Sociedad Azucarera de Chitré, with a capital of 30,000 balboas, to develop the sugar industry in the Province of Herrera. The Panama Sugar Co. owns 11,456 hectares of land in the neighborhood of Chiriqui Viejo; of this 600 are planted with cane. Chiari

and Gamarra lately established a sugar factory in the District of Agua Dulce; 120 hectares are already planted with cane, and the planting of 200 more hectares, sufficiently cleared, has been commenced. This company has just received from the United States machinery capable of grinding 240 tons of cane in 24 hours and producing 11 per cent. yield of sugar, or more than 26 tons in 24 hours. The Panama Sugar Co. has invested \$8000,000.

According to the terms of a contract signed by the government a sugar factory will be established with machinery, equipment, steel and wood buildings, stock, etc., to refine a yearly crop of 250 hectares, in the Province of Coclé. The concessionaire is to have at least 100 hectares of sugar cane under cultivation within a year and a half, and the remainder two years and a half later; to produce and place sugar upon the market one year after the contract is accepted; and to train two men from every Province in the most modern scientific methods of sugar refining. The Government, in turn, agrees to consider the enterprise a public utility, permitting free importation of machinery for the factory, as well as apparatus, implements, etc., and to exempt it from national and municipal taxes for a period of 10 years.

By contract with the Department of the Treasury the American firm, Panama Products Co., of Stockton, Calif., agreed to establish in the city of Panama, a factory for the production of butter, lard, chesses, and soft drinks, and other similar articles and substitutes. The company agreed to build a plant worth not less than 25,000 balboas and to employ Panamanian workmen and raw materials when native prices and quality warrant so. The Government promised to consider the enterprise as a public utility, and will permit the entry, duty free, of machinery and necessities, and will permit it to export its products free of duty for a term of 15 years.

A new company has been formed in the city of Colon, known as the United Biscuit & Candy Co., for the establishment of a candy and cracker factory, and will use electric machinery already ordered from the United States for the purpose.

Canavaggio Bros. have recently established a factory for the manufacture of perfumes in the city of Panama, the first of its kind to be put in operation in the Republic.

FOREIGN TRADE.

Panama shows a yearly unfavorable trade. The imports for the last five years averaged about \$9,500,000, while the exports averaged only \$5,450,000.

The bulk of the foreign trade is with the United States.

The value of the declared exports from Bocas del Toro, Panama, to the United States during 1919 were valued at \$2,802,995 during 1919 as compared with \$2,423,680 in 1918. Bananas, valued at \$2,297,663 in 1918 and \$2,676,609 in 1919, were the leading article of shipment.

In 1917 the exportations through the port of Bocas del Toro to the United States were valued at \$2,602,197. In 1917, 4,843,512 bunches of bananas, valued at \$2,467,442 were exported.

Declared exports from Panama City to the United States totaled \$835,389 in 1917 and \$852,153 during 1918.

The American products imported by Panama in 1918 were as follows:

Abrasives, \$8,871; Agricultural implements, \$49,567; Aluminum, and manufactures of, \$15,947; Animals, \$20,819; Art works, \$5,112; Asbestos, manufactures of, \$34,852; Asphaltum, \$34,858; Athletic and sporting goods, \$98,072.

Babbit metal, \$16,688; Billiard tables and accessories, \$5,951; Blacking, shoe paste, etc., \$19,945; Brass, and manufactures of, \$16,805; Broom corn, manufactures of, \$43,630; Brushes, \$35,066; Buttons, and parts of, \$7,813.

Candles, \$23,432; Cars, automobiles, and other vehicles, \$314,807; Celluloid, and manufactures of, \$6,863; Cement, hydraulic, \$472,265; Chemicals, drugs, dyes, and medicines, \$480,355; Chewing gum, \$41,418; Clays, \$5,600; Clocks and watches, \$20,210; Coal and coke \$2,436,529; Coal tar, \$4,667; Cocoa and chocolate, prepared or manufactured (not including confectionery), \$36,280; Coffee, \$17,335; Confectionery, \$148,825; Copper, \$130,833; Cork, \$126,006; Cotton, manufactures of, \$1,903,258.

Dental goods, \$10,009.

Earthen, stone, and China ware, \$150,377; Eggs, \$298,124; Electrical machinery, appliances, and accessories, \$1,074,210; Explosives, \$989,53.

Fibers, vegetable, manufactures of, \$349,141; Fish, \$247,596; Flavoring extracts and fruit juices, \$17,052; Fruits and nuts, \$279,984; Furniture of metal, \$84,325; Furs and fur skins, dressed, and manufactures of, \$1312.

Glass and glassware, \$164,581; Glue, \$3,759; Gold and silver, manufactures of (including jewelry), \$12,192; Grease, \$7,935.

Hair, and manufactures of, \$18,231; Hats, \$50,437; Hops, \$27,858; India rubber, manufactures of, \$343,289; Ink, \$8,628; Instruments and apparatus for scientific purposes, \$30,496; Iron and steel manufactures, (including machinery), \$3,064,358.

Lamps, chandeliers, etc. (except electric), \$47,077; Lead, \$67,680; Leather, \$604,367; Lime, \$3,978.

Malt, \$22,708; Matches, \$18,148; Meat and dairy products, \$1,782,844; Metal polish, \$6,020; Metals, not elsewhere specified, \$3,105; Motor boats, \$5,538; Mucilage and paste, \$15,869; Musical instruments, and parts of, \$30,498.

Naval stores, \$39,636; Nickel, manufactures of, \$2,429; Notions, not elsewhere specified, \$26,029.

Oakum, \$3,513; Oilcloth and linoleum, \$23,045; Oils, \$2,296,734; Paints, pigments, colors, and varnishes, \$282,958; Paper, \$521,802; Paraffin and paraffin wax, \$13,536; Pencils (except slate) and pencil leads, \$12,015; Perfumeries, cosmetics, etc., \$101,074; Phonographs, graphophones, etc., and records and material for, \$27,631; Photographic goods, \$58,481; Plaster, builders' and common, \$4,242; Plated ware (except cutlery and jewelry), \$35,092; Plumbago, and manufactures of, \$6,294.

Refrigerators, \$10,152; Roofing felt and similar materials, \$33,465.

Salt and gravel, \$10,071; Seeds, \$5,441; Shoe findings, \$7,629; Silk, manufactures of, \$101,769; Silk, artificial, \$24,107; Soap, \$24,493; Spices, \$15,775; Spirits, wines, malt liquors, and other beverages, \$161,922; Starch, \$17,090; Stone, and manufactures of, \$29,300; Straw and palm leaf, manufactures of, \$7,912; Sugar and molasses, \$120,839; Surgical appliances (not including instruments), \$40,931; Suspenders and garters, \$11,103.

Tin-in plgs, bars, etc., \$8,166; Tobacco, \$368,091; Toys, \$30,655; Trunks, valises, and traveling bags, \$15,787.

Umbrellas and parasols, \$17,678.

Wood, 1,051,359; Wool, manufactures of, \$82,300.

Yeast, \$19,564.

Zinc, \$22,452.

The products of Panama, imported by the United States in 1918 were as follows:

Animals, including fowls, \$366; Art works, \$625.
 Bones, hoofs, and horns, unmanufactured, \$4,734; Brass, fit only for remanufacture, \$21,034.
 Chemicals, drugs, dyes and medicines, 57,455; Cocoa, or cacao, crude, \$123,379; Coffee, \$246,527; Copper, and manufactures of, \$531,365; Cotton, unmanufactured, \$884.
 Dyewoods, all other, \$75,055.
 Fruits and nuts, \$3,297,938.
 Grease and oils, \$15,534.
 Hats, bonnets, etc., \$36,836; Hides and skins, (except fur skins), raw or uncured, \$646,895.
 India rubber, etc., crude, \$504,801; Iron and steel, and manufactures of, \$47,716; Ivory, vegetable (Tagua nuts), \$225,152.
 Lead, and manufactures of, \$2,984.
 Manganese, oxide and ore of, \$129,000; Meat and dairy products, \$291,913; Metals, \$815.
 Paper stock, crude (except wood pulp), \$1,560; Paper, and manufactures of: Books, etc., and other printed matter, \$521; Pearls, and parts of, not strung, \$38,290; Platinum, \$35,254.
 Shells, unmanufactured, \$108,927; Sugar: Cane, \$3,201.
 Tin-Ore, \$399,244; Tungsten-bearing ore, \$26,143.
 Vegetables, \$8,127.
 Wood, and manufactures of, \$65,790; Wool, unmanufactured, \$15,806.
 Zinc, pigs, blocks, and old, \$1,789.

There is a fair demand here for toilet preparations among the better class of natives and the American colony in the Canal Zone. All such specialties are imported, and all of the well known American makes and some of the French and other European brands are on the market. The retail prices vary from 25 cents to \$1, according to the size and quality.

The cost to the merchant in Panama seems to be about 30 per cent. greater than the cost in the United States.

Opinions differ here as to the best methods of creating a demand for a new preparation on the market. Some recommend the securing of a reliable representative from among the larger merchants, to whose discretion would be left all matters concerned with bringing the product to the attention of the public. Other merchants declare the best results are to be gained by an advertising campaign in the leading papers.

The United States statistics show that Panama imports more paint than all the other Central American countries combined. However, the exports from the United States to Panama include shipments to the Canal Zone, where the consumption of American paint is much greater than in the Republic of Panama. The paint shipped to Panama from the United States in 1913 amounted to \$122,399, in 1914 to \$151,274, in 1917 to \$316,525, in 1918 to \$282,963, and in the first half of the 1919 fiscal year to \$116,646, indicating a slight decrease since 1917.

On February 8, 1919, the United States and Panama concluded a commercial travelers' convention identical in every respect to that made between Guatemala and the United States on December 3, 1918 (See Page 401.)

CUSTOM REGULATIONS.

The following information will be a great aid to shippers doing business in Panama:

Shippers to Panama are required to have six copies of the invoice made out in Spanish and seven copies of the bill of lading certified by the consul of Panama. The invoice must give a detailed description of the goods shipped, and the quantities according to unit used in the trade. In case of shipments of liquors, the mark, origin, and kind of liquors must be given without abbreviations. The number of bottles or half bottles in each case or barrel must be stated. In the case of certain articles like automobiles, adding machines, typewriters, cameras, etc., the name of the make should be indicated, as well as the catalogue number. All invoices covering manufactured goods must have a sworn statement in Spanish, as follows: "Declaramos bajo juramento que los precios y las cantidades de las mercancías a que esta cuenta se refiere son verdaderos." Such statement must be signed by the manufacturer.

Parcel post shipments do not require invoices or bills of lading, but their value must be declared. A separate invoice is required for each mark. Shipments must not be consigned "to order." In case of goods going through Panama to a foreign port, the invoices must be presented to the Panama consul at the port of original shipment. Shipments for the Panama Canal Commission are exempted from the payment of consular fees. Consular fees are collected in Panama.

By presidential decree of March 22, 1918, it is provided that in cases where executive permission is granted for the importation of arms and munitions a copy of the permit shall at once be forwarded to the Panaman consul at the foreign port of shipment.

An executive decree has been issued forbidding the importation into the Republic of cattle and hogs either for slaughtering or breeding purposes, unless the shipment is accompanied by a certificate issued by the proper authorities at the port of embarkation and viséed by the consul of Panama at said ports, stating the animals are in good health. In case shipments of stock be made without being accompanied by the certificates referred to, tests shall be made of the animals covering such shipments and entry only allowed into the Republic provided they are found to be in good condition. The expenses of these tests are to be borne by the owners.

Panama maintains consuls at Atlanta, Ga.; Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Galveston, Tex.; Gulfport, Miss.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Norfolk, Va.; Pensacola, Fla.; Philadelphia, Pa.; and San Francisco, Cal.

SHIPPING.

Prior to the war shipping connections between the United States and Panama were probably better than with any other Latin-American country. All ships enter and clear from Balboa and Cristobal, the terminal points of the Canal, but which, for all practical purposes, form parts of the cities of Panama and Colon. At present there is direct communication between New Orleans and Cristobal Colon by vessels of the United Fruit Co., and with New York by the United Fruit Co., Grace & Co., and

the Panama Railroad Steamship Co. Grace & Co. and the Pacific Mail Steamship Co. run vessels several times a month between American west coast ports and Balboa, Panama.

Panama, being one of the largest commercial routes, has shipping connections with all the world, and has the largest tonnage entering and sailing in any of this continent south of the United States. The tonnage is increasing steadily and for the last few months averages about 200 ships with a combined tonnage of over 700,000, entering and sailing monthly.

The Holland-American Steamship Line will establish a Steamship Service between Valparaiso and the Ports of Panama, making ports of call along the northern coast of Chile.

The Royal Dutch West India Mail Steamship Co. of Amsterdam has just inaugurated a new line of ships from that port to Colon-Cristobal and one to Valparaiso. On the route between Amsterdam and Cristobal there are four passenger and freight ships and also four freight vessels that carry only a few passengers. The sailings are once a month, and the only regular port of call is Cristobal. Agencies have been established in Panama and Colon.

Contracts were signed in Sept., 1919, for a large bonded warehouse in Colon, in which space may be rented by any American manufacturers or exporters who may wish to have stocks of goods in storage here to supply their customers in Central and South American countries. It is understood that the Panamanian Government will receive a revenue of about 2 per cent. on the value of goods taken from this warehouse for export to other countries.

The Colon Electric & Ice Supply Co. is about to double its capacity in order to meet the increasing local demand for ice and electric power, heat, and light. In this connection, it is planned to construct an addition to the present plant for the cold storage of meats, fruits, and vegetables. The new building will also have facilities for the care of silks, tobacco and tobacco products, which are frequently damaged by exposure.

Two more bonded warehouses are to be built in Colon. Four large importing firms have secured three lots for a warehouse for their wholesale business in Colon and a firm in Panama with a branch house in Colon has also secured three lots in this city for a bonded warehouse to accommodate its business in both cities. The first bonded warehouse in Colon is doing a successful business, and another bonded warehouse has begun to do business in temporary quarters until a building can be erected for the use of the company interested. The object of these warehouses is the extension of wholesale business from Colon into Central and South American countries.

The Government made a contract on September 23, with Sr. Ramon Fernandez to take charge of the construction of a pier at Aguadulce.

On the foundations of the old pier of the Royal Mail Steamship Co., laid in 1853, the deck construction department of the Panama Canal is building a pier for the use of the local coastwise traffic at Colon (including schooners sailing between this port and the Colombian island of San Andres). The vessels in

the coastwise traffic bring coconuts, ivory nuts, balata, and other native products to the port of Colon for exportation through the adjacent port of Cristobal, Canal Zone, from which all exports to foreign countries are shipped.

FINANCE.

The total National Revenue from July to September, 1919 was 1,202,081 balboas, the Government expenditures for the same period being 905,409 balboas, leaving a surplus of 296,672 balboas. Seventy-five per cent. of this surplus was to be used for the construction of public highways and 25 per cent of this surplus was to be used for the construction of public highways and 25 per cent, for unforeseen expenses. The amount used in the construction of roads was 225,504 balboas.

The decree relating to the two-year budget for taxes and expenditures for 1919 to 1921, inclusive, issued by the President on the 28th of June, 1919, computes the national revenue for the economic period beginning the first of July, 1919, and ending the 30th of June, 1921, at the sum of 7,220,474 balboas and fixes the net expenditures at the same sum for the same period, distributing them among the different departments of the Government as follows: Administration and justice, 2,664,910 balboas, foreign relations, 182,440 balboas; treasury, 1,935,817 balboas; public instruction, 1,100,730 balboas; agriculture, 1,356,577 balboas. Any excess revenue over that calculated will be distributed in the following manner: Not less than 75 per cent. to be used to establish a fund for road building and repairing, and not more than 25 per cent. to cover extra or special credits not in the budget for necessary expenses.

A law of December 30, 1918, authorized the Executive to secure by appointment or contract a fiscal agent, either national or foreign, to which end he will solicit the good offices of the Government of the United States. The agent referred to was expected to submit a detailed report on the financial conditions of the Republic, together with a statement of the internal and foreign debt, and the present revenues of the country and their sources. It was to be the duty of the agent to co-operate in preparing the budget and the fiscal laws, to inspect the accounting system in the Republic, see that the laws concerning same are complied with, and to aid in the settlement of accounts and claims having their origin in the different offices of the Government.

The President procured the services of the American financier and accountant, Addison T. Ryan, to advise in the reorganization of the public treasury of Panama, as he had previously done in the Republic of Haiti. Mr. Ryan, who was recommended for the office by the Government of the United States, began investigations early in February, 1919. Beginning July 1, 1919, the treasury was to be directed by a branch of the International Banking Corporation, which was to establish agencies in the Republic.

The President obtained the services of Dr. Clarence J. Owens, an American expert, which a view of establishing a National

Agricultural Bank. Dr. Owens reached Panama in May, 1919, accompanied by Boris A. S. Aronow, Thomas R. Preston, Robert M. Estes, Emilio M. Amores, and Charles H. Baker, to undertake an examination of economic and agricultural conditions in the Republic and report concerning the establishment of such a bank.

A law promulgated on March 13, 1919, for the registration of manuscripts or public documents in which private or commercial organizations are constituted or chartered, created a tax of 25 cents per \$1,000 capital or fraction thereof, up to a capital of \$5,000,000, above which an additional charge of 10 cents per \$1,000 or fraction thereof is to be collected.

According to a table published by the office of public registration, the number of mortgages registered in that office from the 1st of January, 1914, to the 1st of July, 1919, were 1,452, of which 271 were on country property and 1,181 on city property. The aggregate amount involved in the former was 2,848,484 balboas, and the amount in the latter was 5,754,959 balboas, making a total of 8,603,443 balboas.

The municipality of Panama has been authorized by the National Assembly to contract a municipal loan, at 9 per cent. interest annually, and to arrange for advances in installments as needed, in order that payment of interest upon the whole sum or the entire time may not be necessary.

The President was authorized by the National Assembly to contract a loan of \$1,000,000 for the payments of credits due.

BANKING AND MONEY.

The following are the principal banks in Panama:

Bank of the Canal Zone. Colon. State Bank.
 "Bank of Panama." Established in 1875. Capital \$250,000.
 Continental Banking and Trust Co. State Bank. Capital \$1,000,000.
 International Banking Corporation. Panama and Colon. (Branch of New York City.) Capital, \$3,250,000.
 Panama Banking Co. Panama and Colon. New York office, 17 Battery Place.

Banking Holidays.

January 1, New Year's Day; January 6, Epiphany; February 2, Purification; February 22, Washington's Birthday; March 4, Shrove Tuesday; March 25, Annunciation; April 1, Holy Thursday; April 2, Good Friday; April 3, Holy Saturday; May 13, Ascension Day; May 30, Memorial Day; June 3, Corpus Christi; June 29, St. Peter and St. Paul; July 4, American Independence Day; August 15, Assumption; September 1, Labor Day; September 8, Nativity; October 12, Columbus Day (Discovery of America); November 1, All Saints' Day; November 3, Separation from Colombia; November 27, Thanksgiving Day; December 8, Immaculate Conception; December 25, Christmas Day.

The monetary unit in Panama is the gold Balboa weighing 1.672 gramme '900 fine, to which the United States gold dollar is legally equivalent. Silver coins are the peso (of 25 grammes and .900 fine) and the half, fifth, tenth, and twentieth peso pieces and nickel coins of 2½ cents. There is no paper money.

Two silver pesos of Panama currency are taken as equivalent to one U. S. gold dollar.

RAILROADS.

The most important railway on the Isthmus is, of course, the Panama Railroad, owned and operated in the interests of the United States Government, the holder of its \$7,000,000 stock. The railway extends from Colon to Panama and owns extensive and valuable terminals in the two cities. The total track under the Panama Railroad control not including canal construction tracks, is about 135 miles.

In February, 1914, the Government of the Republic of Panama made a contract for the construction of a 53-mile narrow-gauge railway in the Province of Chiriqui, to extend from the Pacific port of Pedregal to David, capital of the Province, thence to Boquete, with a branch from David to La Concepcion.

The United Fruit Co., owns or operates a large mileage, mostly radiating from the Caribbean port of Bocas del Toro. These lines were constructed primarily for the banana trade, but handle also passengers and freight. The cost of the railways owned by the United Fruit Co. in the Republic is \$3,587,373 and of the tramways, \$12,916.

A concession was granted by the Government early in 1917, for the construction of a railway from the Chagres River to Almirante and other places in the Atlantic coastal region.

PUBLIC UTILITIES.

Panama City is the only one on the Isthmus containing a traction line. Colon and Panama are lighted with electricity and gas and have telephones, good water, and other improvements.

The Panama Electric Co., an American corporation, was registered in 1914, as successor to the Panama Tramway Co. The franchises of the company are for 50 years from 1913, with renewal privileges. The road extends from Balboa to Ancon, Bella Vista, and Sabana, traversing Panama City, the total length being 10 miles.

The authorized capitalization of the Panama Electric Co. consists of (\$2,500,000 stock) and \$1,050,000 first-mortgage gold 5 per cent. bonds due 1944.

The Panama-American Corporation, with capitalization of \$500,000, is operated in the interest of the Electric Bond & Share Co., of New York, its majority stockholder. The company controls the Telephone Co., of Panama, and also manufactures and serves electricity and ice.

The Panama Gas Co., incorporated under the laws of Delaware, established a gas works in the city of Panama. The capitalization of the company consists of \$500,000 stock, par \$25, and \$700,000 first-mortgage 6 per cent. bonds due November, 1925.

The Colon Gas Co., has outstanding \$250,000 stock, par \$25, and \$400,000 first-mortgage 6 per cent. bonds due May 15, 1935.

An electric lighting and power service was inaugurated at Penonome early in 1918. A water system for the city is also planned.

There are telegraph cables from Panama to North American and South American ports, and from Colon to the United States and Europe. Roads are being constructed throughout the country. There are 96 post-offices and 37 telegraph offices.

In July, 1919, a meeting of American officers and representatives of the Panaman Government took place in the Department of Foreign Relations to discuss means for constructing a system of military roads which the United States Government intends to build in the provinces of Panama and Colon for the industrial and agricultural development of the country as well as for military purposes. The plans for the road system prepared by the American engineers, will extend over some 500 miles, and include an area reaching from the Atlantic to the Pacific, with terminals at San Miguel de la Borda, Porto Bello, Chepo, and Chame. The cost of the undertaking, which will be borne entirely by the United States, is estimated at \$20,000,000. On the Pacific side the principal roads will be San Miguel to Chepo; Gatun to Nombre e Dios; Fort Randolph to Panama, which is now almost completed; Panama to Chepo, by way of Pacora; Miraflores to Chame; San Miguel to Chorrera; Fort Randolph to Pueblo Nuevo, by way of Alajuela; and Empire to Chame, by way of Chorrera. On the Atlantic side, branch roads will be constructed from the main highways to points on the coast such as Chame, Port Chorrera, Punta Bruja and Chico. A direct road will also be built from Panama to Chepo.

PRINCIPAL DEALERS.

The following is a list of the principal dealers in imported goods in Panama:

PANAMA CITY.

Importers of Dry Goods and Notions.

Eisenmann & Eleta, "American Bazaar" Central Ave. No. 25; C. W. Muller, "La Mascota" Central Ave. No. 37; Cardoze & Pereira, "The Palais Royal" Central Ave. and 9th St., No. 10; Huertematte & Co., Inc., "French Bazaar" 8th and Sosa St., No. 10; The Maduro Co., "La Ville de Paris" Central Ave. No. 21; Piza Piza & Co., Ave. and 8th St. No. 12; Quelquejue Jimenez & Co., "El Cielo" North Ave. No. 24; Cohen Acrich & Co., "Au Bon Marché" Central Ave. No. 54; S. L. Toledano & Sons, Central Ave.; Maduro Fidanque Hnos., B. Ave. and 8th St. No. 13; M. D. Cardoze, "La Dalia" B Ave. and 8th St. No. 13.

Women Apparel.

F. C. Herburger & Co., Inc. North Ave. and 8th St. No. 17; Luria & Co., B Ave No. 14; Lindo & Louis, Central Ave. and 9th St. No. 8; Toledano & de Lemos, "The Tokio Bazaar" Cathedral Park No. 28.

Importers and Exporters.

Isaac Brandou Bros., Inc. 8th St. No. 9; American Trade Developing Co., Central Ave.; C. Quelquejue, Sosa and 7th St. No. 9; Eduardo Icaza, A. Ave. No. 53; Fidanque Brothers & Sons, 6th St. No. 18; Antonio Gambotti, North Ave. and 11th St.; Nicanor Villaluz, 11th St., No. 123; Pascal Canavaggio, Central Ave.; Thomas McNish Co., Central Ave. No. 53; Antonio Guerra, Central Ave. and 8th St. No. 8; A. Jacobs, B. Ave; Simons & Hart, Central Ave. No. 22; Fl-

denke & De Castro, 6th St. No. 19; Frang Ulrich, B St. No. 1; Fat & Co., 13th East St. No. 5; Po Chong & Co., North Ave. and 13th St. No. 1; Kito Chen, 11th St. and North Ave. No. 11; Yee Chong & Co., North Ave; Kwong Mee Long & Co., 13th East St. No. 10; Tuck Wo Hing Lung Kee & Co., 13th East St. No. 8; Hop Hing Lung Ltd., North Ave.

Hardware.

Emanuel Lyons, Central Ave. No. 14; M. D. Cardoze (Panama Hardware) Sosa St. No. 4; Chiari & Kohpcke, Central Ave. No. 93; Duque y Co., Central Ave. and Arango Square No. 14; Hnos. Bertoli, North Ave. No. 33.

Books and Stationery.

Benedetti Hnos., Central Ave. and 3rd St.; I. L. Maduro Jr., Central Ave. and 5th St. No. 24; Vibert & Dixon, Central Ave. No. 23; Alberto Lindo, Central Ave. No. 175; John G. Gill & Co., Central Ave. and H St. No. 2; Y Preclado y Co., Central Ave. No. 35.

Jewelry.

Moran & Ford, Central Ave. and 8th St. No. 7; Scadron Optical Co., Central Ave. No. 23; H. Willmsen, Ancon Ave. No. 100.

Druggists.

Hnos. Benedetti, "La Union" Central Ave. No. 17; Manuel Espinosa B., "Farmacia Central" Ave. Central y calle 10 No. 4; J. Van der Hane & Co., "Botica Inglesa" Ave. Central No. 27; O. Chapman, "Botica Nacional" Central Ave. No. 20; F. Bertoli, "Botica Internacional" Calle 12 Oeste No. 57.

Importers of Tobacco, Cigars, and Cigarettes

Isaac Brandon Bros. Inc., 8th St. No. 9; José Padrós, Arango Square No. 3; Vibert & Dixon, Central Ave. No. 23; American Trade Developing Co., Central Ave.; Alberto Lindo, Central Ave. No. 175; I. L. Maduro Jr., Central Ave. No. 161.

Lumber and Building Materials.

C. Quelquejeu, Central Ave. No. 96A.; Robert Wilcox, North Ave (P. R. R. Yard); American Trade Developing Co., Central Ave.; A. B. de Obarrio, Herrera Square and 9th St. No. 11; Juan de la Guardia, North Ave. and 15 East St. No. 65; Duque & Co., North Ave. (P. R. R. Yard.)

Furniture.

The Levy Furniture Co., Inc., Central Ave. No. 97; Guillermo Cowes, Central Ave. No. 28; R. Pullignani, Central Ave. No. 86.

Electrical Supplies.

S. H. Salmon, Central Ave. No. 18; M. D. Cardoze, Sosa St. No. 4; Emanuel Lyons, Central Ave. No. 14.

COLON.

Fidanoue Henriques & Co., Importers of general merchandise and liquors. Exporters.
Robert Wilcox, Importers of lumber and building materials, hardware, paints and Exporters.
Smidt & Co., Importers of general merchandise.
James Hyatt, Exporter of mineral products, etc.
Max Freundlich, Commission Agent.

PARAGUAY.

The area of Paraguay proper, situated between the rivers Paraguay and Alto Parana, is estimated at 65,000 square miles, or about the size of the State of Washington. Paraguay claims Chaco, which lies between the rivers Paraguay and Pilcomayo, an area of about 100,000 square miles, but this however, is disputed by Bolivia. The total population, not including about 50,000 Chaco Indians, was, in 1915, estimated at 1,000,000, and consists, in Paraguay proper, of Guaraní Indian, European (chiefly Spanish) and Negro blood, the Guaraní largely predominating. In 1916 there were probably about 100,000 foreigners in Paraguay.

The population of Asunción, the capital, which was founded 1537, was estimated at 120,000 in 1916; other towns are Villa Rica, 26,000; Concepción, 15,000; Encarnación, 12,000; San Pedro, 8,700; Luque, 15,000; Carapegué, 15,000; Paraguari, 10,000, and Villa del Pilar, 10,000.

Data compiled by the Bureau of Statistics of the Government of Paraguay show the area of the Republic, in round numbers, to be 44,500,000 hectares, of which 22,892,500 are utilized in various ways, and 21,607,500 hectares, valued at 1 peso per hectare, are unexploited government land. Of this area 27,700,000 hectares are in the western region and 16,800,000 in the eastern section of the country. The utilized portions of Paraguay consist of stock lands, 12,000,000 hectares; yerbales or Paraguayan tea lands, 2,812,500 hectares; timber lands, 8,000,000 hectares; tobacco lands, 10,000 hectares; sugar-cane lands, 6,000; rice lands, 1,000; forage lands, 8,000; peanuts, beans, corn, mandioc, fruit lands, etc., 45,000; and communal lands of cities and towns, 10,000.

GOVERNMENT.

A republican form of Government is provided for by the Constitution of Paraguay.

The Senate and Chamber of Deputies form the National Congress, and are both elected by direct popular vote. Senators are elected for a term of six years, at the rate of 1 for every 12,000 inhabitants or fraction over 8,000. Deputies are elected for four years, on the basis of 1 for every 6,000 inhabitants, or fraction exceeding 3,000. Every two years, the senate is renewed by thirds and the Chamber of Deputies by halves. Congress meets annually on April 1 and continues in session until August 31. On the motion of four deputies and two senators, or by the will of the President, extraordinary sessions may be called at any

time. Electors, chosen for the purpose, elect the Vice-President for a term of four years.

Dr. Manuel Franco, elected president for the term expiring August 1920, died in June, 1919. Dr. José Montero, who was vice-president, took office immediately and acted as President until the end of the term. The presidential election is about to take place at the time of going to press, and Dr. Manuel Gondra, who was minister of Paraguay to Washington, was the candidate having more chances of being elected.

In November, 1919, an ad referendum obligatory general arbitration treaty was concluded in Montevideo between the representatives of the Republics of Paraguay and Uruguay. Under this pact all controversies arising between the high contracting parties, and which can not be settled through diplomatic channels, are to be submitted to arbitration. The arbitrator is to be the president or ruler of a State, and if no agreement can be arrived at as to his selection, the parties in interest shall submit their dispute to the Permanent Tribunal of The Hague established under the conventions of 1899 and 1907. The treaty is operative for a period of five years, and if not denounced by one of the parties shall be considered extended for a period of another five years, and so on successively.

The Government of Paraguay and Uruguay concluded a coastwise convention, under the terms of which each of these nations permits vessels of the other to participate in the coastwise trade of the country under the same rules and regulations and upon the same terms accorded national vessels. This convention is to remain in force until one year after one of the high contracting parties manifests its desire to the other to terminate or amend same.

The President has issued a decree establishing temperance zones in Paraguay, the first official movement of any character to restrict the manufacture and sale of distilled liquors in the country. The movement was initiated by the American meat-packing companies that have recently opened plants in this country. Heretofore the concerns had prohibited the sale and use of liquors on their premises, but it was found that employees could make purchases from the numerous small liquor stands put up in the vicinity.

AGRICULTURAL PRODUCTS.

Paraguay is a country of forests, with an area of woodland of not less than 11,250,000 hectares, on which grow in abundance construction timber, dyewoods, and wood for paper and other uses. There are also a large number of fiber producing plants in the Republic, especially cotton, which could be exploited industrially at a profit. Oil-producing plants abound, such as coconut palms, copaiba, and spurge. These grow wild in various parts of the country.

Of the forestal products quebracho or ironwood, from which tannin is obtained for export, is most valuable.

The orange crop in normal years amounts to about 220,000,000 oranges.

Oil-producing products, such as spurge, peanuts, coconuts, etc., are exported, and corn is grown in abundance for local consumption.

Mandioc, which is cultivated throughout the Republic, yields from 20,000 to 22,000 kilos per hectare, and is used entirely for food purposes; but starch, flour, tapioca, and alcohol could be manufactured from it on a large scale.

Rice and sugar are also important products of the country, but the output at the present time is insufficient for domestic consumption.

The production of cotton decreased during the war, but steps are being taken to cultivate it on a scale sufficiently large to supply the needs of home consumption and leave a surplus for export.

The Bureau of Lands and Colonies has recommended that a large tract of public land in the San Juan Nepomuceno district be divided into lots for the use of settlers, in accordance with the provisions of the homestead law recently enacted by Congress.

Tobacco is one of Paraguay's important products; most of it is exported, while the remainder is made up into cigars for the local trade. A small amount of tobacco in the leaf is imported from Cuba and Brazil to be used in the manufacture of cigarettes. Official statistics show the following exports: 1914, 4,517,195 kilos; 1915, 7,145,781 kilos; 1916, 6,826,914 kilos; 1917, 6,943,203 kilos; and in 1918, 7,051,478 kilos.

QUEBRACHO.

There are at least six quebracho factories operating in Paraguay, five of which are controlled from Buenos Aires and are presumably of Argentine ownership. The International Products Co., an American corporation, of 120 Broadway, New York, has just built the sixth plant at Puerto Pinasco, Paraguay, and began operation about the end of the year.

The five Buenos Aires controlled plants, export all their products to Buenos Aires, whence, it is understood, the bulk of it is reexported as Argentinian extract. The American company exports its quebracho extract direct to New York.

The number of tons of quebracho extract produced in Paraguay is as follows: in 1915, 28,421 tons; in 1916, 15,357 tons; in 1917, 25,105 tons, and in 1918, 23,180 tons.

In spite of the higher prices for which quebracho extract has sold since the war the production has been considerably below normal, due chiefly to strikes of transportation companies of Paraguay and Argentina, during which time all shipping had to stop because of insufficient warehouse to store accumulated stocks at the plants.

The principal companies engaged in the quebracho industry in Paraguay are the following, with their capital in Gold pesos: Campos y Quebrachales Puerto Sastre, 1,488,000, Sociedad Go-restal de Puerto Guarani 583,000, Compañía de Tierras Carlos Cascado (Ltda.) 1,500,000, Quebrachales y Estancias Puerto Gailleo 1,000,000, Quebrachales Fusionados (a) 770,000, New York

& Paraguay Co. 2,000,000. Total 7,341,000. La Industrial de Nueva Italia, with an authorized capital of 100,000 paper pesos; the American Quebracho Co., with an authorized capital of 3,000,000 gold pesos; La Forestal del Paraguay, with an authorized capital of 264,000 gold pesos; and La Rural Belga Sud-América, with an authorized capital of 226,000 gold pesos.

The following are among the companies interested in the timber industry: Timber Yuty Co. (Ltd.), Capital invested, Gold pesos, 125,000; La Rural de Yegros, Capital invested, Gold pesos, 160,000; La Industrial Paraguaya, Capital invested, Gold pesos, 3,464,120; La Italo-Paraguaya, Capital invested, Gold pesos, 200,000; Montes y Estancias San José, Capital invested, Gold pesos, 115,000; Campos y Bosques de Loreto, Capital invested, Gold pesos, 40,000; Cia. de Tierras Carlos Cascado (Ltda.), Capital invested, Gold pesos, 675,000; Industrial & Commercial Co. of Northern Paraguay, Capital invested, Gold pesos, 500,000.

THE YERBA-MATE.

Yerba mate is a most important product of Paraguay, being raised in the eastern and central parts of the country. It consists of the leaves of a tree somewhat resembling an evergreen, which is from 15 to 25 feet in height. The leaves are bright green in color and originally were gathered wild. In recent years, however, the trees have been cultivated with considerable success. Trees come to bearing after five years and in 12 years begin to yield the maximum amount, generally 15 to 17 pounds per annum. It is generally estimated that between 10,000,000 and 12,000,000 persons in South America regularly use the drink and its use is spreading throughout Latin Europe, and has even reached the United States. The wild yerba still exists in very large amounts, and there is no danger of an exhaustion of the supply. The tax gathered by Paraguay on the exportation of the yerba is used largely to provide funds for the service of the external loan.

There are over 200 estates or concerns engaged in the production of the yerba. Among the companies engaged in its production and exploitation are La Industrial Paraguaya, capitalization 3,464,120 gold pesos, and Boettner & Gautier, "Yerbarero", capitalization 80,000 gold pesos. La Industrial Paraguaya is controlled by the Argentine Railway. Its securities are largely deposited as collateral for the latter's 6 per cent notes.

LIVE STOCK.

In 1915 Paraguay had 5,249,043 head of cattle, with a surplus of 500,000 head available for export, of which only 60,000 or 70,000 were sent to Argentine packing houses, and from 8,000 to 10,000 were utilized for domestic purposes in the manufacture of jerked beef. The result was the establishment of the San Antonio packing house, with a capacity of 1,000 head of cattle per day. This establishment began operations on January 1st 1919. Another packing house in which American capital was

interested commenced to operate at Zeballos-cue in 1918, and now has a daily output of 60,000 pounds of meat. The San Salvador Meat Extract Co., with a daily capacity of from 50 to 90 head of cattle, utilized for the making of meat extracts and canned beef, has also passed into the hands of American capitalists. For a number of years the annual output of the Risso packing house has been from 8,000 to 15,000 beeves used in the production of jerked beef.

It is estimated that the grazing regions of the Republic could easily feed 20,000,000 head of cattle.

In the Paraguayan refrigerating plants and salting plants, during the year 1918, 57,089 steers were slaughtered, and the products were valued at 1,829,596 gold pesos, divided as follows: Frigorífico Zeballoscue, 32,404 beeves, Frigorífico San Salvador, 15,509 beeves, Saladero Risso, 9,176 beeves.

The live-stock industry in the Republic has attracted considerable amounts of foreign capital. The most important companies interested wholly or partly in the raising and selling of livestock or otherwise identified with the live-stock industry, with their capital in gold pesos are: La Granadería Saccarello, \$1,000,000; La Granadería Paraguaya, \$500,000; La Granadería Franco-Paraguaya, \$200,000; Montes y Estancias San José, \$150,000; La Rural Española, \$300,000; Campos y Bosques de Loreto, \$200,000; Fuerte Olimpo \$500,000; Cia. Paraguaya de Tierras, Campos y Granaderías, \$1,500,000; Plantaciones y Criadores Girard, \$50,000; La Granadería Cancio Deandreis, \$140,000; La Granadería Piri-Puco, \$100,000.

La Granadería Paraguaya is controlled by the Paraguay Land & Cattle Co., incorporated in Maine, U. S. A., in 1913. The 1,500,000 shares of the Paraguay Land & Cattle Co., are held mostly by the Argentine Railway, and are deposited as part collateral for the railway company's issue of 6 per cent notes.

A joint stock company entitled "La Rural Española" (Spanish Rural Co.), with a capital of 600,000 pesos, was recently organized in Asuncion, for the purpose of engaging in the stock industry.

The Stock Raising Association of Paraguay recently organized a stock fair to be held annually in May. The organization does not intend to confine the exhibition to cattle only but will exhibit other animals of various kinds.

MINERAL RESOURCES.

Iron, manganese, copper, and other minerals are encountered in abundance. The Ibicui iron mines were worked as early as 1863, and produce ore assaying 34 per cent iron. The Quiquió and Ibicui manganese mines contain ores which assay as high as 63 per cent, and the ore deposits are estimated at 60,000,000 tons. Copper has also been found at San Miguel and Quiquió.

INDUSTRIES.

Sugar is one of the principal industries in Paraguay. The gross weight of the production for 1918 was given as 387,500,000 kilos, and that for 1919 was estimated at about 400,000,000.

During the year 1918 the refineries produced 561,820 kilos of sugar, 180,121 liters of rum, 51,500 liters industrial alcohol, and 325,900 liters rectified alcohol.

The textile industry will soon be established in the country. The Textil Paraguaya, a native company, has now in Itape the necessary equipment to start factories. The company will limit itself to supplying the demands of local markets with the finished products of the fibers that it has been cultivating extensively. The national demand for gunny sacking, cord, sisal thread, etc., is of sufficient extent to make the supplying of the products a profitable business for the company, and establish the industry firmly in the country.

The Paraguayan Packing House & Cold Storage Co., who has a subscribed capital of 250,000 gold pesos, is incorporated for a period of 50 years with headquarters in the national capital, the purpose of engaging in the operation of packing and cold-storage plants in Paraguay and in neighboring countries should it deem advisable, as well as in the purchase and sale of cattle, sheep, and hogs, and in such other business as its board of directors may consider expedient. The company is also authorized to establish branch packing houses and cold-storage plants in different parts of the Republic and to build and operate such railways, tramways, docks, etc. as may be considered necessary in facilitating the transaction of its business.

FOREIGN TRADE.

The foreign commerce for the years 1914 to 1918, was valued at 81,932,672 gold pesos, of which 35,526,223 gold pesos were imports and 46,406,449 gold pesos were exports.

The value of the foreign commerce during 1917 was 11,605,197 gold pesos, of which 5,105,625 were imports, and 6,499,572 exports, showing an excess of exports over imports of 1,393,947 gold pesos.

In 1918 this commerce amounted to 22,451,334 gold pesos, made up of imports, 11,051,622 gold pesos, and exports, 11,399,712 gold pesos.

For the first half of 1919 the foreign commerce amounted to 12,628,891 pesos gold, of which 6,006,660 pesos represented the importation and 6,662,231 pesos the exportation.

The imports for 1918 in Argentine gold pesos were: Food and groceries, etc., 1,443,616; Wines and liquors, 237,214; Tobacco, etc., 10,330; Leather, skins, etc., 31,962; Trunks, saddles, etc., 3,962; Shoes, etc., 44,204; Furniture, 15,100; Jewels, etc., 1,439; Musical instruments, 9,491; Hats, etc., 50,302; Hardware, etc., 870,254; Electrical articles, 36,421; Firearms, etc., 24,665; Chinaware, etc., 42,458; Drugs, chemicals, etc., 197,779; Haberdashery, etc., 274,021; Clothing, etc., 163,367; Textiles, 1,512,988; Live animals, 182,153.

The following are the chief products exported from Paraguay in 1918: Corned beef, 1,992,612 kilos; Tallow, 224,501 kilos; Jerked beef, 791,514 kilos; Peanuts, 23,841 kilos; Yerba mate (tea) crude, 3,598,593 kilos; Yerba mate (tea) ground, 29,843 kilos; Quebracho extract, 19,096,008 kilos; Oil of Petit-

grain, 36,163 kilos; Tobacco common, 5,866,161 kilos; Tobacco strong, 1,137,642 kilos; Tobacco black, 44,575 kilos; Hides, salted, 405,625; Hides, dried, 87,105; Oranges, 80,328,700; Oranges, mandarins, 18,331,150; Lumber, Quebracho logs, 523 tons; Other classes, 47,710 tons; Posts, 25 tons; Planed, 4,523 cubic meters.

The following figures show the extent to which the chief countries participated in the foreign trade of Paraguay in 1918, values being expressed in Argentine gold pesos.

Imports.—Argentina, 2,429,104; Uruguay, 85,962; United States, 816,630; Brazil, 253,567; Chile, 2,527; Germany, 915; United Kingdom, 1,011,681; France, 56,929; Italy, 84,855; Spain, 288,420; Netherlands, 9,800; Japan, 29,934; Cuba, 3,763; Portugal, 3,552; All other countries, 74,087.

Exports.—Argentina, 4,101,865; Uruguay, 386,581; United States, 742,607; Brazil, 6,423; Chile, 1,050; United Kingdom, 13,042; France, 298,150; Italy, 134,531; Spain, 461,060; All other countries, 26,002.

Hides, meat, and quebracho extract account chiefly for the decided increase in the exportation to the United States; prohibition of exports and shortage of ships for the slight decrease in the imports from the United States.

On account of the difficulty of obtaining merchandise elsewhere since the outbreak of the war, the importation of all American manufactured articles has increased enormously; appreciating the difficulties due to the war, the local importers, were patient and willing to accept any and all conditions set by the American exporters. However, in order to retain this market after the war, it is very important, not only to deliver goods exactly like the sample, but also to modify and grant such terms of payment that will meet competition.

The following products were imported from Paraguay by the United States in 1918:

Chemicals, drugs, dyes, and medicines: Tanning extracts, all other \$418.

Hides and skins (except fur skins), \$10,196.

India rubber, gutta percha and substitutes for, crude, \$3,105.

Oils: Vegetable-Distilled and essential, \$56,078.

The following American products were imported by Paraguay in 1918:

Agricultural implements, \$5,274.

Blacking, shoe paste, etc., \$158; Brass and manufactures of, \$8,557; Breadstuffs, \$193.

Cars, automobiles, and other vehicles, \$8,739; Cement, Hydraulic, \$11,959; Chemicals, drugs, dyes, etc., \$12,308; Clocks and watches, and parts of, \$343; Cotton, manufactures of, \$54,109.

Electrical machinery, appliances, and instruments, \$22,929; Explosives, Cartridges, loads, and manufactures of, \$17,246.

Fibers, vegetables, manufactures of, \$5,863.

Glass and glassware, \$1,795.

India rubber, manufactures of, \$5,248; Iron and steel and manufactures of, \$436,640.

Lead, manufactures of, \$9,149; Leather and manufactures of, \$96,668.

Oils: Mineral, lubricating, \$4,566.

Perfumeries, \$2,513.

Wood: Shocks, \$8,000.

Invoices certified at the Asunción consulate during the six months ended June 30, 1919, show that 26,726 hides, valued at \$389,157, 4,965,543 pounds of quebracho extract, valued at \$427,978, and 7,744 pounds of oil of petitgrain, valued at \$20,046, representing a total of \$837,181, were exported from Paraguay to the United States, as against 18,675 pounds of oil of petitgrain, valued at \$35,180, which were certified for export for the corresponding period of 1918.

The gain comes as a direct result of the American owned quebracho and meat packing plants which began operations in 1918.

There is practically no textile industry in Paraguay, aside from the making of a small amount of cotton and palm-fiber materials. All of the real textile goods are therefore imported from foreign countries. The actual values of the imports of textiles, expressed in gold pesos have been as follows: 1913, 2,263,000 pesos; 1914, 1,016,000 pesos; 1915, 1,032,000 pesos; 1916, 2,891,000 pesos; 1917, 3,455,000 pesos; 1918, 3,636,000 pesos.

The United Kingdom has always held the predominating share of this trade, normally, supplying from 50 to 60 per cent. of the total, and being followed by Germany, with approximately one-fourth. Even throughout the war, the direct imports from the United Kingdom showed almost no change in their relative importance, accounting for 54.4 per cent. in 1914 and 55.5 per cent. in 1918. Because of the enormous increase in the cost of textiles and Paraguays' largely augmented imports of such goods, this British trade increased in value more than 350 per cent. The largest gains by any of the manufacturing nations are those of the United States and Japan, both increasing their trade seven-fold.

American goods, which occupied eighth place in 1914 were second in 1918.

The demand for imported underwear in Paraguay is limited, the greater part of the underwear in use being made in the home from materials bought in the local stores. The hosiery used there is mostly of cotton and some of cotton and silk mixture; more than half of the hosiery imported comes from the United States. Garters imported are principally of cotton.

The most serious obstacle to the extension of American trade with Paraguay is that of credit terms. Throughout the war English houses continued giving credits of from six to nine months at 6 per cent. interest on open account or draft, as did German houses previous to the war, while American exporters have insisted on cash at the time of shipment. If this difference in terms continues, it will result in the loss of the gains American exporters have made in Paraguayan trade during the past three years.

Paraguayan textile houses usually import their goods direct from foreign markets, there being no important distributing houses in this country, and as most of the houses also handle other lines, American commission houses, rather than the textile manufacturers themselves, can better supply the trade. Merchants generally prefer to include a general line of textiles in each order for shipping advantages.

Metric units of weights and measures are used in this country, and for this reason all measures should be given in the metric system. Very careful attention should be given to packing, especially as all goods must be transshipped at either Buenos Aires or Montevideo to the river steamers which come to Asuncion. The containers should be of the lightest weight possible, as all duty is paid on the gross weight of the packages.

If trade-marks have not already been registered by the manufacturers, it is advisable to omit special marks, as not infrequently individual persons here register trad-marks so as to prevent competitors from handling the line or for the purpose of exacting a premium for the right to sell under the mark.

SHIPPING.

By purchase by the Mihanovitch Company, and Argentine shipping concern, of the two competing lines existing on Paraguay river, the company has gradually increased its importance and became a monopoly. This however, was broken by the entrance of the Brazilian Companhia Minas e Viacao de Matto Grosso, which has established a service between Montevideo and Upper Paraguay.

The stock of the Brazilian company amounts to about 1,000,000 United States gold, and the capital obtained by loans to practically \$750,000. A further value of \$2,500,000 is represented in the fleet controlled by the company. Almost all of the vessels have been rented from the Lloyd Brasileiro. The company is to operate eight steamers, the two largest of which have a carrying capacity of 1,000 tons. Thirty-six lighters and eight tugs are included in the fleet. Furthermore 20 vessels have been contracted for construction in the United States. The central offices are located in Rio de Janeiro, with agencies in Montevideo, Asuncion, and Corumba.

The Government of Brazil exercises a large measure of control over the operations of the new company's transportation service, and the officers of the company's boats are at the same time officers in the national navy. This new company has already had a favorable effect upon river commerce by lowering the freight rates considerably.

The company plans to operate at least one boat a week between Corumba and Montevideo. The only Argentine port of call will be Rosario, since the Argentine law prohibits foreign-owned ship companies from carrying on a coastwise trade between Argentine ports. In Paraguay its vessels call at Asuncion, Concepcion, and other river ports.

The local chamber of commerce has proposed to organized a fleet of small ships with a total tonnage of 1,500. In support of the project, the President of the Republic has offered Government funds amounting to 5,000,000 Paraguayan paper pesos. The fleet will be under the direct management of the Asuncion Chamber of Commerce.

The Paraguay River is free to navigation of boats belonging to all nationals, with the restriction that no boats of other than Argentine citizens, native or naturalized, can serve the commerce

within that Republic. The Paraguayan regulations have no such inhibition, placing no restraint even as to Paraguayan local commerce; and as to Argentina, foreign boats may either, but not both, receive or discharge cargo within Argentine territory.

During about nine months of the year, from October to June, the river is very low; this makes it impossible for boats that draw more than 8 feet to reach Asuncion from Buenos Aires or Montevideo. In order to obviate the interruption of river traffic and many other difficulties arising from the low draft, a bill has been presented to the National Congress proposing to establish a commission to take charge of the dredging and the canalization of the Paraguay River. The funds for this work are to be obtained by charging 1 cent gold on each 10 kilos of goods imported or exported.

Freight facilities on the Paraguayan River are not satisfactory at present and complaints are numerous as to the tardy handling of goods. A large American company operating in Paraguay has intimated that after establishing the activities already started, it may turn its attention to river transportation, at least for the handling of its own products, and perhaps for the service of the general public.

The Compañía Paraguaya de Navegación has lately been organized in Asuncion with Uruguayan, Paraguayan, and Argentine capital to carry freight between Asuncion, Buenos Aires, and Montevideo.

The Central Product Co., of Paraguay, has obtained the consent of the National Government to establish a National Coastwise Service with its own vessels.

CUSTOM REGULATIONS.

The following data concerning custom regulations are of interest to shippers:

Four copies of consular invoices are required together with certificates of origin of a special form in duplicate and bills of lading in quadruplicate are required for all shipments. Weights and measures must be according to the metric system. Bills of lading must be certified by the Paraguayan consul at the port of shipment, and if the shipment goes via Montevideo, the bill must be viséed by the consul of Uruguay, who requires one non-negotiable copy in Spanish, but if the shipment is via Buenos Aires or Rosario, no non-negotiable copy is required. All goods destined for Paraguayan ports should be packed in cases that may be easily handled and adapted to rough usage. A fee of \$2 is charged for certifying a set of three negotiable bills of lading, and one non-negotiable consular copy for Paraguayan consul, and 50 cents for each additional negotiable copy. There is no charge for non-negotiable copies, nor for invoices and certificates of origin. Goods are permitted entry if the invoice is omitted. In every case the bill of lading must be duly viséed by the Paraguayan consular officer.

Occasionally goods are routed to Asuncion on one bill of lading covering both the ocean and the river carriage, but even in such cases it is necessary to send one full set of properly

visaed shipping documents to the consignee's agent at the port of transshipment to avoid long delays. It is generally preferable to ship on two bills of lading, one to Buenos Aires or Montevideo and the other for the river steamer to Asuncion, the latter of which is obtained at the port of transshipment. It is necessary that the first bill of lading show that the goods are in transit to Paraguay to avoid the Argentinian or Uruguayan duty.

In order to standardize the method of collection of consular fees the following regulations were adopted, which went into effect April 15, 1919: The consular officials may not receive customs duties other than the proper documentary stamps which are attached to the bill of lading; and the documents which because of the lack of evaluation are sent without such proper stamps must be marked "A reponer" (To be filled out), and they shall be presented and filled out in the internal-revenue offices, as this formality is necessary for their acceptance in the customhouses.

Customhouse invoices covering machinery must express the number of machines, horsepower, use, and the net and gross weight. Exports, such as extract of beef, canned meats, and other forms of meat that are shipped in heavy parcels, shall be accompanied by a declaration of the gross and net weights. Package destined for exportation shall be labeled "República del Paraguay".

The entry of goods is made at Paraguayan customhouses on the presentation of the manifest by the shipping company's agent. After unloading the goods must be cleared from the customhouses within three days to avoid storage charges. Warehousing is charged for after the expiration of the three days at the rate of one-half per cent. per calendar month or fraction thereof up to six months, and 1 per cent. per month after six months. No fines are imposed on account of delays of entry.

Goods not cleared within one year of ship's entry are sold at public auction. In the case of inflammable or perishable goods the time is reduced to eight days. The expenses assessed against goods sold at public auction are those incurred by the customs clearing agent and the warehouse charges mentioned in the preceding paragraph, and are usually ultimately borne by the consignee.

Goods may be obtained from the customhouse by the consignee under declaration that the bill of lading has not arrived and that it will be presented within 14 days after delivery of the goods. A deposit of 210 paraguayan pesos at the time the declaration is furnished is required by the Paraguayan customs office as a guaranty that the bill of lading will be presented, which deposit is forfeited if the document is not presented within the time limit. If, however, bills of lading are made out "To Order" it is not possible to secure the goods previous to the arrival of the bill of lading, providing, there is no clause such as "notify, etc."

A Presidential Decree of September 10, 1919, increases the tax on the export of quebracho extract from 5 pesos Argentine gold per metric ton of 2,204.6 pounds to 8 pesos per ton, to take effect September 20, 1919.

The increase in this tax is due to the increased prices in the

selling markets and also to the fact that Argentina has a tax of 12,33 pesos per ton.

INCREASE IN PARAGUAYAN IMPORT DUTIES.

In accordance with the recommendations of the special commission appointed to revise the customs tariff, the President of Paraguay issued a decree on September 27, 1919, increasing the fixed official valuations on which the ad valorem import duties are assessed in the following proportions:

Groceries and foodstuffs, excepting edible oils, rice, sugar, flour, wheat, common laundry soap, kerosene, and common or fine salt.	60%
Wines and liquors, excepting common wines which are increased 60 per cent.	100%
Tobacco, etc.	60%
Leather and tanned skins	30%
Trunks, valises, saddlery	50%
Boots, shoes, and accessories, with the exception of shoes for men, women, and children	50%
Furniture	50%
Jewelry, clocks, and watches, silverware	20%
Musical instruments	40%
Hats and caps	60%
Hardware, cutlery, machinery, farm implements automobiles, etc.	60%
Electrical and illuminating supplies	60%
Arms and ammunition	60%
China ware, glassware, crockery, etc.	60%
Drugs and chemicals	60%
Small wares, haberdashery, paper goods, perfumery, and novelties, excepting fine toilet soaps, cosmetics, and perfumes in general, which are increased 80 per cent.	60%
Clothing and ready-made apparel, except clothing of cotton goods, which is increased 40 per cent.	60%
Textiles of all kinds, except cotton piece goods, which are increased by 40 per cent.	60%

The result of these increases in the official valuations is to increase the duties on all articles for which official valuations are fixed, in accordance with the above schedule. The ad valorem rates themselves remain unchanged. The new rates became effective October 1, 1919.

It is to be noted that while the valuations for common boots and shoes are increased 50 per cent, the valuations for medium and high grade footwear are not changed and the rates for such footwear are not affected.

By a presidential decree of February 24, empty cases intended to inclose domestic products to be exported are being admitted free of duty.

The treasury department fixed the import duties on automobiles at 42 per cent. of their value.

The port of Villaeta is now open for the importation of foreign goods. The port was closed some time ago in an effort to prevent smuggling. It is claimed, however, that the measure did not prove effective, as the increased cost of merchandise due to extra freight charges aroused considerable opposition in Villaeta and tended to promote rather than to eliminate clandestine importation.

Paraguay has the following consulates in the United States:

Boston, Mass.; Chicago, Ill.; Cincinnati, Ohio; Detroit, Mich.; Indianapolis, Ind.; Mobile, Ala.; Newark, N. J.; New York, N. Y.; Newport News, Va.; Norfolk, Va.; Philadelphia, Pa.; Richmond, Va.; Rochester, N. Y.; St. Louis, Mo.; San Francisco, Cal.; San Juan, P. R.; Wilmington, Del.

FINANCE.

Paraguay raises its revenue by custom duties, and special charges on warehouses and wharfs; by internal revenue; by receipts of post and telegraph offices; by special taxes, rentals and bank interests.

The national receipts for the fiscal period from October 1, 1917, to December 31, 1918, totaled 1,182,424 pesos gold and 64,398.185 pesos paper, of which 914,975 gold and 36,524,151 paper, or more than half, were received through the custom-houses.

The customhouses receipts in the three past years were, 1916, 717,067 pesos gold and 27,260,337 pesos paper; 1917, 952,430 pesos gold and 39,705,169 pesos paper; and 1918 (11 months), 813,076 pesos gold and 29,313,071 pesos paper.

The internal revenue receipts during 1918 amounted to 11,839 pesos gold and 20,994.081 pesos paper.

In 1918 the postal and telegraph receipts showed an increase of 203,000 pesos over those of the previous year.

The customs receipts amounted to 547,362 pesos, coined gold and 10,424,862 pesos paper, for the first six months of 1919. Of this amount 271,073 pesos gold and 10,231,637 pesos paper represent the imports, 275,330 gold, and 94,070 paper the exports, and 959 gold and 99,155 paper the internal revenue.

According to the report of the general auditorship and office of the treasury, 42,389 pesos gold and 1,220,152 pesos paper were derived from taxes on real estate during the years 1912-1918, inclusive. Of this amount, 19,204 pesos gold and 343,485 paper were received during 1918.

The receipts and expenditures of the municipality of Asuncion for the year 1918 were: Receipts, 5,950,326 pesos; expenditures, 6,314,138 pesos, leaving a deficit of 373,812, caused largely by the aid the municipality extended to indigents during the epidemic of influenza.

By a presidential decree of January, 1919, a tax of \$2 gold was levied on every head of cattle to be registered or salted. The decree applies to male beasts of any age or size and to female animals of over 9 years.

A recent law provides for tax on corporations, by which the invested capital of such companies shall be taxed as follows: From 50,000 to 100,000 pesos, 0.50 per 1,000; from 100,000 to 200,000, 0.60 per 1,000; from 200,000 to 500,000, 0.70 per 1,000; from 500,000 to 1,000,000, 0.80 per 1,000; and over 1,000,000 1 peso per 1,000. Companies with a capital of less than 50,000 pesos are exempt from taxes. In all other cases the tax will be collected on the part of the capital over and above 50,000. It will be collected yearly, based on the capital held January 1, and in one payment. When a company owns property in the coun-

try and also in other countries, the tax will be levied only on the tangible or intangible property within the country. From the capital upon which the tax is to be collected, the amount of debts held against it, as positively proved, shall be deducted and the tax shall be paid before March 31 of every year.

By decree of February 11, 1919, the Government fixed the rate of gold exchange at 1,795 per 100 in the payment of import duties and tariff on goods destined for internal consumption.

DEBT.

The foreign debt of Paraguay, in Jan. 1, 1919, was as follows: External Debt of 1886-1896, outstanding, £704,250. Coupons in arrear, January, 1919 (inclusive) £31,691, Total £735,941.

Argentine National Bank Loan, 68,227 pesos gold; loan, law of November 27, 1912, 2,090,261 pesos gold. During 1918 the sum of 272,282 pesos gold amortization fund was paid.

The internal debt of the nation amounted to 2,044,783 pesos gold and 33,133,445 paper on January 1, 1919.

Between July 1914, and December, 1915, only four monthly instalments of the Debt Service were paid, but in May, 1916, the full service of interest and amortisation for one half-year was remitted. After this no further payments were made until January, 1918 when the Government resumed remittances.

The director of the treasury was authorized by the President to issue bonds to the value of 500,000 pesos, gold in March 1919.

According to the latest presidential message the office of exchange has a capital of 1,394,356 pesos gold and 1,017,211 pesos paper.

The loans granted by the Agricultural Bank of Asuncion in 1918 for agricultural projects and allied industries totaled 2,475,903 pesos paper and 1,245 pesos gold; amortization paid in the year, 4,485,034 pesos paper and 1,245 pesos gold; and interest received, 1,122,397 pesos paper. The bank has a capital of 24,590,097 pesos paper, which is utilized in the development of agriculture in the country.

BANKING.

The condition of Paraguayan Banks on January 1, 1919 was: Banco Mercantil, deposits in gold, 1,460,000 pesos; deposits in currency, 54,860,000; loans, gold, 2,590,000 paper, 85,490,000; cash in hand, gold, 630,000, paper, 18,070,000. Bank of the Republic—deposits in gold, 1,780,000, paper, 44,700,000; savings, gold, 200,000, paper 4,310,000; loans, gold, 3,870,000. Bank of Spain and Paraguay—deposits, gold, 750,000, paper, 22,920,000; savings, gold, 250,000, paper, 7,070,000; loans, gold, 720,000, paper, 29,960,000; cash on hand, gold 280,000, paper, 10,140,000. Agricultural Bank—deposits, currency, 2,500,000; loans, paper 25,580,000; cash on hand, currency, 3,430,000. The capital of the Mercantile Bank is 25,000,000 pesos, paper, with a reserve fund of 14,100,000; that of the Bank of the Republic is 4,000,000 pesos, gold, with a reserve fund of 1,500,000 gold and 300,000 paper; that of the Bank of Spain and

Paraguay is 8,980,000 paper, with a reserve fund of 880,000; and that of the Agricultural Bank is 34,590,000 paper, with 1,730,000 reserve.

Including the assets of the Banco Constructor (with a capital of 1,550,000 pesos, paper), the Commercial Credit fund (1,550,000 pesos paper), the Industrial & Commercial Agency of Villarrica (1,360,000 pesos, paper), and the office of exchange, which received 10,000,000 pesos in bills from the Government and 830,194 pesos, gold, and has a reserve amount of 3,310,000 pesos, paper, the total of the principal accounts of the institutions enumerated at the beginning of 1919 were as follows: Capital invested, 4,830,000 gold, and 83,564,000 paper; reserves, 1,500,000 gold, and 20,570,000, paper; deposits, 4,165,000 gold, and 126,060,000 paper; savings, gold, 1,328,000; paper, 43,280,000; loans, 7,177,000 gold, and 174,227,000 paper; cash on hand, 4,723,000 gold, and 59,936,000, paper.

The net profits of the Bank of the Republic for the half of 1919 amounted to 349,720 pesos in gold coin. The authorized capital of this institution is 20,000,000 gold pesos, the subscribed capital is 6,000,000, and the reserve 1,500,363 pesos.

The volume of business of the Banco Mercantil del Paraguay for 1918 reached a total of 7,252,084,657 pesos, currency, as against 6,333,613,370 in the previous year, showing an increase of 918,571,287 pesos in 1918. Deducting the expenditures the loss and gain account shows a net profit of 1,250,000 pesos.

The net profits of the Bank of Spain and Paraguay in Asuncion amounted to 1,560,482 pesos, currency, in the year 1918.

A branch of the Banco de España y Paraguay was established the middle of July 1919, in the town of San Ignacio de las Misiones.

Branch banks will soon be established in Asuncion by the Banco de Londres y de la Plata and the National City Bank of New York. A branch of the Bank of Spain and Paraguay was opened in San Ignacio.

Credits and Collections.

The principal banks in Paraguay have correspondents in American cities and are prepared to furnish credit reports upon any firms in Paraguay or to assume collections of crants. The banks in Buenos Aires also have credit information upon the larger importers in Paraguay and can furnish it in the same manner as for inquiries regarding Argentine firms.

Paraguay is a country in which long-term credits are an absolute necessity, and often such facilities are of more importance, in obtaining trade, than the actual prices quoted. British firms offer terms of five, six, or even nine months from the time of shipment, with interest at 5 or 6 per cent and usually on open account. The desirability, for the Paraguayan merchant, of buying on open account is especially evident because of the fluctuations in exchange; and many European houses, realizing this, do not insist upon strict compliance with the formal terms of sale. Since the end of the war British houses have promised more convenient terms than in the past, amounting, in fact, to an almost

unlimited open account upon which the merchant is charged interest but is permitted to pay at his convenience.

Usually a month elapses after the goods arrive in Buenos Aires before they are received by the Paraguayan importer. The goods are sold by the importer upon long terms of credit and payment is very often taken in produce. The Paraguayan bankers have very limited means, which do not permit them to engage very extensively in making loans to the merchants.

These factors make it necessary for the foreign shipper to be prepared to extend the essential credit facilities. American exporters are expected to offer terms of at least four months from receipt of goods in Asuncion when draft is employed, or six months on open account from time of shipment to receipt of payment in the United States. Exports from Paraguay to the United States are financed from Buenos Aires or Montevideo. The greater part of the business is done through Buenos Aires, and the most of the bills of exchange covering Paraguayan exports are drawn in that city.

Imports to Paraguay, however, are always covered by bills of exchange drawn on consignees in that country. As all imported goods must be transshipped at Buenos Aires or Montevideo it is necessary to send one full set of shipping documents to the transshipping, or the consignee's agent in the port of transshipment to avoid delay, for drafts are not accepted in Asuncion until the goods arrive.

The usual fee charged by Asuncion banks for the collection of accounts held by foreign banks on all class of drafts, is one-fourth per cent. with a minimum charge of 25 centavos, Argentine gold for drafts of small amounts.

Each draft presented for collection must bear a Paraguayan stamp as follows: For sight drafts or up to six days, 50 centavos; for drafts of nine days up to six months, 1 peso per \$1,000 or more; for drafts of more than six months, 2 pesos per \$1,000 or more. Such expenses are usually charged against the drawer of the draft. Checks or drafts remitted by Paraguayan banks in settlement of collections for foreign banks do not require any Paraguayan stamps. Unpaid drafts must be presented before 11 o'clock a. m. on the day following due date. A notary draws up the act and notifies drawee who states his reason for not paying. The note of protest is made by the notary on the back of the draft, a copy of which may be obtained when required.

The regular protest charge is 30 Paraguayan pesos for each signature to draft. If the draft is not in Spanish, an additional translation charge of 60 Paraguayan pesos for each page is made. These charges are made whether the bill is taken up or not.

Exports from Paraguay to the United States, are financed from Buenos Aires or Montevideo. The greater part of the business, is done through Buenos Aires, and most of the bills of exchange covering Paraguayan exports are drawn in that city.

Banks generally will accept goods on consignment for transfer to the drawee according to terms specified in the bill, but only when the goods represent the value of bills sent for collection. Banks do not accept goods for the sole purpose of selling or storing them.

If the foreign exporter or banker wishes to hold control over goods sent to Paraguay the bills of lading should be made out to the collecting bank in Asuncion.

In case the consignee refuses to accept goods on their arrival banks will generally arrange with a broker to sell the goods if the exporter desires it. For such services the bank charge is usually 1 per cent. The brokerage charge depends on the class of goods.

Before goods may be cleared from a Paraguayan customhouse the import duty must be paid. In the case of goods that have been consigned to a collecting bank and that are to be returned, the duty is usually paid in the form of a "banker's guaranty." It is necessary to obtain a "reexport permit" from the Paraguayan Treasury Department before goods may be re-exported or returned to the country of origin. If the permit is obtained, the bankers are not required to pay the duty for which guaranty has been given, provided the customhouse landing certificate is presented within 60 days, after which time the guaranty is forfeited. If the duty is once paid in actual money, it can not be returned.

Banking Holidays.

January 1, New Year's Day; February 3, San Blas Day; April 1, Holy Thursday; April 2, Good Friday; May 13 and 15, Independence Days; August 15, Assumption; October 12, Columbus Day; November 1, All Saints' Day; November 25, Adoption of Constitution; December 8, Immaculate Conception; December 25, Christmas Day.

RAILROADS.

The Paraguay Central Railway is the only line of importance in the Republic. The following is a list of the railways in the country, with their mileage:

Central of Paraguay, main line, Asunción to Encarnación, 230; Central of Paraguay, Borja to Tacuaras line, 34; Concepción to Horqueta Railway (Guggiari, Gaoni & Co., owners), 27; Quebrachales Fusionados Puerto Max (line to the river), 9; Puerto Ybapolo (timber line), 15.

In Western Paraguay.

Puerto Galileo line, 15; Campos & Quebrachales Puerto Sastre Railway, 27; Quebrachales Fusionados Puerto Maria, 26; Carlos Casado (Ltd.), 31; New York & Paraguay Co., 25; Cia. Forestal de Paraguay, 9; Maria Luisa, 3; Puerto Guaraní Line, 16. Total, 467.

The Paraguay Central Railway dates its existence from the year 1859, when the Government began its construction with the intention of carrying it from Asuncion as far as Villa Rica, 96 miles. The line was continued as far as Paraguari, about 50 miles, prior to the outbreak of the war against Argentina, Uruguay, and Brazil.

In 1889 the Paraguay Central Railway Co. was formed in England and purchased the line from the Government, agreeing to extend it to Villa Rica and later to continue it to Villa Encarnación, opposite Posadas, Argentina. The line to Villa Rica was completed at the close of 1889, and a further 60-mile extension was completed in 1891. The final extension to Villa Encarnación was put in service in 1911. In October, 1913, an extension of the Argentine Northeastern Railway was completed to Posadas and through passenger-train service established between Buenos Aires and Asunción. In order to make direct connections it was necessary to change the gauge of the Paraguay Central Railway from 5 feet 6 inches to 4 feet 8½ inches.

The capitalization of the company, which was increased considerably, consists of 600,000 prior lien debenture stock, bearing interest at the rate of 6 per cent. per annum, 500,000 6 per cent. three-year notes, 1,300,000 5 per cent. debenture stock, and 562,930 ordinary shares of 10 each. A part of these funds was invested in the acquisition and electrification of the Asunción Tramway, Light & Power Co.

In October, 1914, a receiver was appointed for the company.

The receipts and expenditure from traffic, in pounds sterling, for the year ending June 30, 1918, were as follows: Passenger, £43,644; Cargo, 89,865; Parcels, 6,951; Various, 15,905; Total, £156,365; Expenses, 86,586; Profits, 69,779.

POSTS AND TELEGRAPHS.

The post and telegraph department reports 3,506,868 postal packages transmitted during the year 1918, 4,173,768 packages received, 127,892 telegrams sent, and 100,378 telegrams received.

In 1918 there were 269 kilometers of telegraph lines put into public service which, together with the 447 kilometers of the previous year, form a total of 716 kilometers for the past two years.

Commencing May 1, 1919, parcel-post packages for Paraguay were accepted in the United States post-office up to a weight limit of 11 pounds, under the conditions and classifications applicable to the service in general and with particular reference to the prohibitions indicated in section 180, on page 153, of the Annual Postal Guide for 1918. The postage rate is 12 cents a pound or fraction thereof plus an additional charge of 30 cents for each parcel, whatever its weight, to cover the transit service of the parcels through Argentina.

Affective August 15, 1919, the postage on all first-class letters to countries not members of the South American Union with its seat at Montevideo was increased from 1.25 Paraguayan pesos to 1.75 pesos. This extra charge of 50 Paraguayan centavos is to cover the cost of the trans-Atlantic service.

To overcome the lack of means of communication between the chief centers of the country and the important industrial establishments of the north, the Paraguayan Government proposes to extend the telegraph line from Puerto Pinasco to Bahía Negra. The work will be done at the expense of the companies

established along the line under the supervision of a chief engineer paid by the Government.

The new line will be by cable from Puerto Max to the west shore of the river, continuing north to Puerto Pinasco and directly to Bahía Negra, touching at all intermediate points, such as Puerto Casado, Puerto Sastre, Puerto Guaraní, and Puerto Olimpo on the Chaco side of the river.

Not only will this be done at no expense to the Government, but it will open up a new source of revenue.

PUBLIC UTILITIES.

Practically the only public utility company is the Asuncion Tramway, Light & Power Co. (Ltd.), controlled by the Paraguay Central Railway.

On October 16, 1914, a receiver was appointed for the Asuncion Tramway, Light & Power Co. This company was unable to meet the interest on advances and debentures issued to provide funds for electrification purposes. Operating results have been below expectations, partly through exchange conditions.

The tramways carry over 3,000,000 passengers a year, and over 8,000,000 pounds of freight. The length of the system is 27 miles, of which 17 miles are operated by electricity, 7 miles by steam, and 3 miles by mules.

FOREIGN INVESTMENTS.

The foreign investments in the principal industries of the Republic, exclusive of railways and nonpublic enterprises, amounted to about 25,000,000 gold pesos and about 75,000,000 paper pesos. Great Britain has invested, it is estimated, about \$18,600,000 in Paraguay this including a large majority of the external loan, most of the railway shares, the Asuncion Tramway, Light & Power property, cattle, yerba-mate, and quebracho companies, etc. France has a large number of shares in the principal banks, cattle interests, etc., and possibly has \$7,000,000 to \$8,000,000 gold in the country's enterprises. Argentina, Belgium, Germany, Italy, and the United States, have also placed fair-sized sums in Paraguay.

PRINCIPAL DEALERS.

The following is a partial list of the most important dealers in Asuncion, Paraguay:

Druggists.

Gustavo Vrovato Espeña 435; Juan Díaz de Vivar, Libertad, esq. Tacuarí; Azofra y Esquivel, Palmas 431; Romulo Feliciangelli y Co., Villarrica y Convención; Ernesto Gruhn, Estrella esq. 25 de Diciembre; Angel Lofuesco, Carnot y Tacuarí; Victoriano Mariotti, Pte. Carnot 20; Vicente R. Pastor, Alberdi esq. a Villa Rica; Juan Pessolani, Oliva 102; M. P. Rosso y Co., 25 de Mayo 92.

Jewellers.

Guillermo Alonso, Palmas esq. Alberdi; Enrique Blanc, Palmas 439; Miguel Cabral Pte. Carnot 32; José Canals, Palma 176; Hipolito Carron, Palma 107 y Pte. Carnot 163; Agustín Gras, Palma entre

Montevideo y Colón; Alfredo Guida, Colón 188; Genaro Guida, 25 de Mayo 81; Alejandro Lopez, Palma 195; Indalecio Ocampo, Palma 207; Pedro R. Ortiz, I. Nacional 213.

Toys.

Julio Coas, Pte. d Carnot y Caballero; Fariña y Co., 15 de Mayo 17-37-199; Emigdio Srutos, Pte. Carnot e Iturbe; Juan G. Morinigo, Palma 47; Rufino D. Recalde, Pte. Carnot y Escalada; Jorba y Rius, Palma 169; Pedro Salas, Palma 241; C. F. Schütz y Co., Palma y 14 de Mayo.

Books and Stationery.

J. C. Codas, Palma 161; J. M. Duarte y Co., Estrella esq. a Montevideo; Luis Teasfé, El Globo Ilustrado; Henry Gosset, Colón 123; Schusman y Grabow, Palma 62; H. Kraus, V. Rica 250; Juan Klug y Mares, Estrella 458 y 440; Carron y Quell, sucra., Palma esq. a Alberdi; Salvador G. Rubio, Colón 114; L. Simon, Estrella 117.

Notions.

Abente y Co., Palma 79;; Monti y Acosta, Carnot 35; Josefa J. Albitre, Palma 334; Aldama y Co., 25 de Mayo 105; Juan Alegre, Palma 202; Miguel Alegre, 25 de Mayo 20; Torres y Alsina, S. Lorenzo entre Salinares y Sta. Fé; Ambrosio Aranda, Pte. Carnot 101; Juan Ballarín, B. Aires y Convención; Juan R. Basualdo, 25 de Mayo 187.

Modists.

Juan Alegre, Palmas 202, 204 y 208; Magdalena V. de Cabús Martínez 168; Dominga de Candia, Estrella y 25 de Diciembre; Vicenta B. de Giner, Estrella 219; Delfina Dubert, 25 de Mayo 10; Juana Luisk, Palma 245; E. Trappani, Palma 419; E. Van den Bosch, Carnot 125; Mad Vieira, Palma 239.

Furniture.

José Biscotti, 25 de Noviembre 343; Altamira y Blat, Estrella 183; Victor Brusa, Villarrica 370; Ricardo Comellas, General Diaz esq. 14 de Mayo; Juan F. Franco, Asunción esq. a Salinares; Vicenta

Men's Furnishing.

R. Abente y Co., Palma 79; Jorge E. Bailey, Palma 99; Casa Francesca, Palma 223; Erasmo Di Nocci, Palma 67; Escobar y Lugo, Palma 339; Juan Espósito, Alberdi 126; Carlos Freytag, Palma 212; W. R. Haywood, Palma 178; Hnos. Prieto, Palma 285.

Perfumery.

Pirotta y Censl, Pte. Carnot esq. Iturbe; Walter R. Haywood, Palmas 178-182; La Igualdad, Pte. Carnot 4; Federico Kranch y Co., Alberdi esq. a Estrella; Perez y Sanjurjo, 25 de Mayo 182 y 186; Silva y de la Fuente, Pte. Carnot 39.

Watches.

Enrique Blanch, Palmas 439; M. Cabral, Pte. Carnot 32; J. Canals, Palma 176; Hipólito Carron, Carnot 163; Guillermo Alonso, Española, Palma esq. Alberdi; Alfredo Guida, Colón 188; Carlos Lavanchy, Colón 123; A. Lopez Palmas 195; Indalecio Ocampo, Palam 207; Pompa y Co., Villa Rica esq. a 25 de Diciembre.

Tailors.

Ramon Alen, Iturbe 374; Nicolas Altini, Estrella 258; Adolfo Amaré, 25 de Diciembre 101; José Arrua, Río de la Plata y Estero Bellaco; Juan Barreto, Yegros y esq. Amambay; Donato Bobadilla, Pte. Carnot 24; Pascual Brexlia, V. Rica 162; Andres Camacho, Iturbe 222; Alfonso Cretella, Estrella 413.

Importers and exporters

Carlos Casallo B., Constant 441; R. Casal, Plazoleta del Puerto 480; Francisco Cattaneo, Libertad 267; Juan Ceriani, España; Angel Crosa é hijos, Palmas esquina 11 de Mayo; Hnos. Cuevas, 25 de Mayo 115; Enrique Dell Accua, Palma 235; J. B. Farine y Co., Escalada y 25 de Mayo; Carlos Freytag, Palma; Gomez y Co., Estrella esquina Alberdi; Ciriaco Gonzalez, Estrella 51; Guillermo J. Gonzalez, Palma; Alberto Guillon, Convencion entre General Diaz y Coronel Martinez; Juan Gugliermovich, Estrella 551; H. Huttemann, Convencion 120; Leon Levi, Palma 220; Lorenzo Manzoni, V. Rica esquina Montevideo; Jorge Marsal; Nicolas Mihanovich, Colon 112.

Hardware.

Torres y Alsina, S., Lorenzo entre Salinares y Sta. Fe; Ricardo Berg, Palma esquina Ayola; Manuel Bermudez, Bermejo esquina Brasil; Hnos. Canela, 25 de Mayo 51; Roque Catalano, Pte. Carnot y Brasil; Cental, Palma 125; Hnos Cuevas, 25 de Mayo 115; Jaime Deu, S. Lorenzo esq. Salinares; Ferreteria Alemana, Independencia Nacional y Carnot; Fermin Iriondo, S. Lorenzo entre Sta. Fe y Republica Francesa; Miguel Nadeo, S. Lorenzo é Isaul; Fracchia y Farini, Colon 220; Jorba y Riis, Palma 169; Jose Serra, Bermejo 50; Jose P. Torres y Co., 25 de Mayo y Estados Unidos.

Hatters.

R. Abente y Co., Palma 79; Jorge E. Bailey, Palma 99; Evasmo Di Nucci, Palma 67; Juan Exposito, Alberdi 126; Juan Jose Giudice, Palma 212; Carlos Freitag, Palma 212; W. R. Haywood, Palma 178-182; Ernesto Mapelli, Palma 140; Hnos. Prieto, Palma 235.

Dry goods.

Censi y Pirotta, Pte. Carnot esq. Iturbe; Federico Krauch y Co., Estrella esq. Alberdi; Alfredo Milner y Co., Libertad esq. Iturbe; Armin Uguarte y Co., Estrella 158.

Shoes.

Hnos. Ballassal, Palma 297; Gello y Co., La Hormiga, Palma 33; Francisco Casella, Alberdi 251; Luis Coscia, Lerro Cora esq. a Yegros; Pascual Cavone, Pte. Carnot 354; Miguel Dacunte, olón 172; Pedro Di Lascio, Pte. Carnot 131; Felipe Fernandez, 25 de Mayo, entre República Francesa y Sta. Fé; Diego Escribá, Pte. Carnot 151; Hnos. Ferraro, 25 de Mayo 24 y 161; Felipe Fernandez, 25 de Mayo y República Francesa; Juan Garozo, Benjamin Constant y Montevideo; Vicente Giancreco, Villa Rica 102; Miguel Giralte, Palma entre Montevideo y Colon; Antonio Lorente, Palma 340; José Maltese, Palma 411; José mas, Estrella 87; Cayetano T. Massi, Palma 113; Domingo Massi, Palma 403; Salvador y Donato Massi, Oliva 44; Pablo Meilicke, Pte. Carnot 45; Jacinto M. Quiñones, Independencia Nacional; Manuel Rabito, Palma 279; M. Samudio y Co., Brasil 269; Bartolom Sastre, Colón 208; Manuel Escribano, 450; Torreani y Co. Palma 71; Luis Zarate, General Diaz 199.

PERU.

The Republic of Peru occupies a total area of about 679,600 square miles, or nearly the size of the West North Central and the East Central States combined. According to the estimated census of 1908, the population was approximately 4,500,000, or 6.6 per square mile. The population of Lima, the capital, according to that census was 140,884; Callao, 34,346; Arequipa, 25,000 to 40,000; Cuzco, 10,000 to 15,000; Iquitos district, 12,000; Ayacucho, 14,346; Haura, 7,646; and Haucho, 6,283.

A decree of the President of the Republic, dated October 10, ordered the regulation of immigration in the following form: The country will pay a third cabin passage for an immigrant of the white race who is not a Gipsy, and for three members of his family; the country will also guarantee the payment of his lodging and maintenance for six days, and all his household goods and personal property, tools etc., will be given entry free from customs duty.

GOVERNMENT.

President Dr. José Pardo, who had been elected for the term ending August 18, 1919, was deposed in July, after the presidential election had been held. Dr. Augusto B. Leguia, who claimed to have obtained a plurality, was placed at the head of the new government, and was formally inaugurated.

After a general election, Congress adopted a new Constitution which was promulgated in January 1920. The principal features of the new Constitution are: The renewal of the legislative power shall be complete and shall necessarily coincide with the executive power. The term of both powers is five years. The legislative power consists of a senate of 35 senators and a chamber of 110 deputies. The senators and deputies and the President of the Republic are elected by direct popular vote. The regular annual session of congress shall be not less than 90 nor more than 120 days. An extra session of congress may be called by the executive whenever he deems expedient. The senate and chamber of deputies shall only meet jointly to inaugurate their sessions, sanction international treaties, and to execute the electoral powers vested in them by the constitution. Members of congress are ineligible to any other public office. Diplomatic ministers shall be appointed by the president and confirmed by the senate. Constitutional guarantees shall not be suspended by any law or authority. Changes in office in the judiciary shall be determined by a law which expressly prescribes the exclusive conditions of promotions. The

tax on incomes shall be progressive. Disputes between capital and labor shall be submitted to compulsory arbitration. Congress shall not grant personal rights involving an outlay of the national treasury. Congress shall not issue legal-tender currency except in case of war. There shall be three local legislatures, representing the north, center, and south of the Republic, which shall meet annually during a period of 30 days, and whose acts shall be communicated to the National Executive for fulfillment, who, in case of non-acceptance, shall submit them, with his observations, to congress in order that they may follow in that body the same procedure as vetoed laws. The provisional councils are autonomous in the management of matters intrusted to them, but the levying of excise taxes must be approved by the Government. There shall be a council of state (cabinet) composed of six members chosen by a vote of the council of ministers and confirmed by the senate. Only the Government may grant, according to law, pensions and compensations. No one shall receive from the Government more than one salary or compensation. The mineral resources are nationalized entirely when located within fifty kilometres of the coast or frontiers.

On August 12, 1919 the President organized his Cabinet as follows: President of the council of ministers and minister of foreign relations, Dr. Melitón F. Porras; minister of the government and police, Dr. Alejandro Maguina; minister of justice and public instruction, Dr. Arturo Osorio; minister of the Treasury, don Fernando Fuchs; minister of war and navy, Gen. J. Ramón Izarra; minister of industry, Dr. Matías León.

Ratification was recently made by the Peruvian Congress, of the International Trade-Mark Convention on April 14, 1920.

A new bureau has been organized, to be known as the Bureau of Labor, under the Department of the Promotion of Industry and will handle all labor matters.

The Peruvian International Information Bureau has recently been organized under the ministry of foreign relations, the object of which is the establishment of a permanent political, economic, and financial informational system.

MINING.

Mining and agriculture are the greatest source of national wealth. The principal mining section is the celebrated Pazco district is located.

Silver is found throughout the Peruvian Andean region, commonly associated with lead or copper or frequently both. A silver-bearing mineral peculiar to Peru is "Cascao," which with copper, forms the great deposit of the Cerro Pazco district. About 70 per cent. of the total gold found in Peru is produced in Puno.

A small quantity of anthracite coal is found in the Chimbote and Huarez districts, and also in Otazco and Huamachuco, and bituminous coal is found in Cajamarca, Ancachs, Ica, Arequipa, Puno and Moquega.

In 1904 vanadium was discovered and now nearly 70 per cent. of the world's output comes from Peru.

The copper output of the smelter of the Cerro de Pasco Copper Corporation, Cerro de Pasco, Peru, during the first half of 1919, was: January, 5,36,828 pounds; February, 4,586,935 pounds; March, 4,836,676 pounds; April, 4,779,511 pounds; May, 4,003,783 pounds; June, 4,026,329 pounds.

The corporation produced 71,904,794 pounds of copper during the year 1918, compared with 72,645,895 pounds in 1917, and 71,022,788 pounds in 1916. In 1919 the output was under the 1918 figures, due largely to the cessation of European hostilities, strikes at the mines, and fall in price.

The copper production, in bars, at the smelter of the Sociedad Minera Bachus and Joshston (owned outright by the Cerro de Pasco Copper Corporation) during the first half 1919, was: January, 1,897,642 pounds; February, 1,642,898 pounds; March, 2,144,285 pounds; April, 2,036,930; May, 1,907,064 pounds; June, 2,101,210 pounds.

The Cerro de Pasco Copper Corporation intends to build a large new smelter at the town of Oroya, situated at the junction points of the Cerro de Pasco Railway and the Central Railway of Peru. The site which has been selected is about 2,000 feet lower altitude than the present smelter at La Fundicion 9 miles from Cerro de Pasco.

In addition to the plant proper at Oroya, a large amount of money is being spent on the construction of labor and staff living quarters, hospital, clubs, etc., of the most approved modern design. Tennis courts and golf links will also be constructed for the use of their employees.

Over 13,000 tons of structural steel will go into the new plant, and for this work some 90 structural steel workers will be brought from the United States. Altogether, when the work is in full swing, the American staff will probably number between 200 and 300 men, and between 3,000 and 4,000 native workmen will be employed.

The production of silver ore is about 900,000 kilos; gold ores, about 15,000 kilos; lead ores, about 4,000 tons; antimony ores, 2,000 tons; zinc ores, 32,000 kilos.

The production of coal in Peru has increased about 1,000 per cent in the last seventeen years, the annual production is now about 400,000 tons but it is insufficient for the domestic needs as the yearly consumption is larger.

A syndicate of capitalists and manufacturers has been organized in Lima to work the Huaday coal Deposits, Department of La Libertad. To facilitate this undertaking a wagon road 70 kilometers long will be built to Pinchaday. It is proposed to change this highway into a railroad as soon as the mining of coal on a large scale is begun.

A law was promulgated on January 1919 for the administration of guano, which is one of the most important products, by the newly formed company. The principal provisions are: The executive power will organize among the agriculturists of Peru a stock company charged with the administration of guano, subject to the following regulations: The contract shall not last more than five years; the capital shall be £200,000 in shares of £1; and the profits shall be 10 per cent, annually on

the effective capital issued, without regard to the part which corresponds to the National Treasury.

If the agriculturists do not subscribe for the total number of shares, they shall be offered to the public through the Chamber of Commerce of Lima. No person can hold more than 4,000 shares.

The Government can not subscribe for nor possess shares in the company and will be represented in its directorate by one person. The statutes of the company must be submitted for the approval of the Government, which shall have the right to approve of the employees of the Company.

All the employees of the company for the administration of guano shall be considered as employees of the Treasury and shall be subject to all constitutional dispositions, legal or administrative, which refer to them.

The State shall sell to the agriculturists the guano through the company of administration, at 2.50 soles for every per cent. of azote (nitrogen) contained in a ton of 920 kilos, net weight, taken in the port of disembarkation, the insurance premiums, the special duties, the value of the containers, and a commission which shall be sufficient to cover the expenses of administration and the profits which the shareholders must receive according to by-laws. It will collect besides, in the cases where it is necessary to transport the guano by railway, what this service costs.

A discount of 50 per cent. on that part of the price which corresponds to the Government will be allowed to: (a) The agriculturists, whether proprietors or renters, who use their hands exclusively for the cultivation of eating fruits and forage crops; (b) the proprietors or renters of farms situated on the coast at more than 60 kilometers from a railway station or from the port of disembarking and who have to transport the guano by beasts of burden; and (c) agriculturists of mountain districts.

The Guano Administration has received a concession from the Government to begin immediately the exploitation of the deposits of Guano on the islands of Bellestas, Shíncha, Isla Blanca, Asia, Pachacamac, Palomino, Cavinzas, San Lorenzo, Cocina, Colorado, the Huara Islands, Don Martín, Guañape, and Macabí. The administration may also exploit the deposits in the Pescadores Islands, south and north of Mollendo. The work on the islands Santa Rosa, Punta de Coles, and Sama will be commenced by the end of October.

In all the railways and docks the guano shall be considered as a charge of the State for the application of tariffs.

The administration of guano shall have under its control all beds of this substance, whether they are located on the islands or on the mainland, without the intervention of any other persons.

The extraction of guano which the Peruvian Corporation may undertake, once the needs of agriculture are satisfied, shall be controlled by the administration.

After Mexico, Peru ranks next among the Latin-American countries in oil production, the production exceeding 2,500,000 barrels of oil per year. The Peruvian zones are at present divided into four fields, three of which lie west of the Andes, in

the Department of Piura, in the northern part of the Republic, and are known as Zorritos, Lobitos, and Negritos.

The principal mining companies, other than mentioned above, are:

Pre Mines and Estates, Ltd. Registered in London in 1909. Office, 39 Lombard St., London, E. C. Capital, \$750,000 (U. S.). Owns gold, silver, copper and coal mines.

Peruvian Corporation, Ltd. Registered in London in 1890. Office, 43-46 Threadneedle St., London, E. C. Capital, \$82,500,000 (U. S.). Controls over 1,000 miles of railroads, the greater part transferred to limited companies. Owns the steamers on Lake Titicaca and held guano concession (up to 2,000,000 tons), which latter has recently been revoked by the Peruvian government.

AGRICULTURE.

The leading crops of Peru are sugar, cotton and rice. The sugar cane industry is carried on chiefly in the coast regions, and about 300,000 acre (more than 100,000 hectares) is devoted to it. There are about 50 plantations, with an average crop of about 150,000 tons, which is largely exported to England and Chile.

The best grades of cotton are grown near Piura and shipped from Palta. Five good crops may be obtained from one planting, the third year representing the maximum yield. Cotton manufacturing is carried on in Lima, Arequipa and Ica, the annual consumption of the raw material amounting to about 3,000 tons.

Since the outbreak of the European war the sugar production in Peru has greatly increased, the average annual output having risen from 185,000 tons during the period from 1910 to 1914, to 250,000 tons in the period from 1914 to 1917. In 1916-17 the output was more than 280,000 tons. It is estimated that of the million acres of fine sugar-cane land in the Republic, only about 100,000 are planted to cane. An effort is being made, however, to increase the area planted. The sugar-producing season in Peru is from October to February, and most of the output is brown sugar having a polarization of 96 or more, which makes it in great demand by refiners.

For several months in 1918 the Peruvian sugar planters had two new markets for their product due to the shortage in Argentina and Mexico. The Argentina statute prohibiting the importation of foreign sugars was suspended until February 1, 1919, but owing to the international crisis between Peru and Chile the suspension was prolonged. These new competitors came into the Peruvian market through force of circumstances, due to the fact that the crops of the other large producing centers were practically all committed to the allies.

Peru is beginning to appreciate the value of tractors, having imported at the rate of 21 per month during the first quarter of the 1919 fiscal year. This rate indicates that the large sugar plantations are replacing by tractors the oxen power which has been used in that country since the earliest days of Indian farming. One estate has shown that a tractor can do in one day what it takes 15 men with 15 yoke of oxen to accomplish in the same

time. Both the sugar and cotton plantations are using the tractors, and special machines for the rice fields are giving remarkable satisfaction.

The cultivation of coca (*Erythroxylon coca peruanus*) the plant from which medicinal cocaine is obtained, is an important industry in certain sections of Peru, principally the Cuzco valley.

The hide industry in Peru is of growing importance as the goat and kid skins of Piura are in great demand and considered especially valuable, owing to their fine texture, flexibility, and adaptability for handling. The wool represents an annual valuation of over \$2,000,000, the export quantity being over 4,000 tons. The wool-bearing animals of the country are the alpacas, sheep and llamas.

CULTIVATION OF HEMP.

Due to the great demand which there has been for sisal hemp or henequen during the past few years, interest has been shown in its cultivation in Peru, where it thrives under many of the desert conditions of the waste lands and is found wild on the hills at altitudes between 6,000 to 12,000 feet. Although only 3 to 4 per cent. of the weight of the leaves is available for fiber, there is no agricultural product of commercial value that can be produced at less expense or in such barren ground. The Peruvian fiber, which is light cream in color, straight, smooth, and clean, is used for the manufacture of cordage and binder twine, both alone and in conjunction with manila fiber is also used for bags, hammocks, and similar articles.

The house of deputies of the Peruvian Congress recently approved a bill authorizing the construction of an irrigation ditch in the Llano district.

A presidential decree of June 27, 1919, approved the general plans furnished by the Department of Waterworks and revised by the superior councils of the system of irrigation in the irrigated areas in the department of the coast.

By a resolution of the government, dated September 3, 1919, it was determined that the haciendas of the Provinces of Lima and of Callao shall devote 15 per cent. of their cultivated land to the production of grains and vegetables. The lands that are sown for pasturage are not to be included in the 15 per cent.

The Hoshi Pharmaceutical Co., of Tokyo, a short time ago, bought a piece of property covering 300,000 hectares of land on the right bank of the Huallaga River, between Huanuco and Tingo Maria, for the growing medicinal plants. The forests of the eastern part of the country are very rich in such plants, among them the chinchona, from which quinine is made. The company has a capital of 5,000,000 yen and is one of the most important in its line in the Far East.

The principal Agricultural Companies, with their capital in Peruvian pounds are: Sociedad Agricola San Nicolas, Lp160,000; Sociedad Ganadera de Junin, Lp110,000; Sociedad Agricola Paramonga, Lp400,000; Ingenio Azucarero Corpacancha, Lp30,000; Sociedad Industrial La Estrella, Lp110,000; Ingenio de Huaura, Lp35,000.

INDUSTRIES.

Peru is not an industrial country. It imports most of the manufactures required, and its manufacturing industries are not up to modern standards. The principal manufactured products are cotton and wool textiles, sugar and leather.

Peru's tanning business is almost entirely in the hands of Italians who operate in a primitive manner. None have complete equipment, while some use no machinery at all. Occasionally those who have splitting machines make no attempt to save the "split" or bottom cut.

The largest tannery in Lima uses about 700 skins per week, of which 300 to 400 are usually cowhides and the rest divided between sheepskins and goatskins.

On June 5, 1918, a new corporation, called the Manufactura de Tejidos de Lana del Pacifico, was formed in Callao-Lima for the manufacture of woolen goods. The concern was incorporated with a capital of approximately \$225,000 and has built a new factory in the suburbs of Lima.

At the present time but two classes of prints are being manufactured, but the factory is expected to produce approximately 225,000 meters per year by June, 1919, and to double this quantity in 1920, if all the machinery ordered is in operation.

Rugs known as Ayacucho rugs are made by the Indians in the Ayacucho district of Peru from the wool of the alpaca, the strands being hand woven. The designs are generally birds, animals, or large and small square and rectangular blocks, while favorite colors are black, white, red, and yellow. Sizes range from 4 feet by 6 feet to 8 feet by 10 feet. Besides being durable, these rugs have the advantage of being reasonable in price, since they sell at retail in Lima for about \$11 or \$12. Some of these rugs are sold in New York.

FOREIGN TRADE.

The value of the foreign commerce of the Republic in recent years has been as follows:

Years	Imports	Exports
1911	\$26,465,224	\$36,119,264
1912	25,015,460	45,871,504
1913	29,631,038	44,409,610
1914	23,495,122	42,668,450
1915	15,064,470	68,729,930
1916	42,256,551	80,497,083
1917	65,711,627	90,728,179

According to statistics recently issued by the Peruvian Government 434,438,799 pounds of sugar, valued at \$20,527,774, were exported in 1918. About 10 per cent. of this amount was shipped to the United States. Other exports listed were 47,447,231 pounds of cotton, valued at \$18,201,992; 14,910,292 pounds of wool, valued at \$13,156,172; 3,268,581 pounds of hides, valued at \$312,507. The United States took about 10 per cent. of the cotton, 40 per cent of the wool and hides, and practically the entire supply of the skins.

Of the foreign commerce the share of the United States in the total imports increased to 66 per cent. in 1917 from 59 per cent. in 1916, 48 per cent. in 1915, 32 per cent. in 1914, and 28 per cent. in 1913. In 1917 the United States bought from Peru 59 per cent. of the total exports of the country, in comparison with 63 per cent. in 1916, 45 per cent. in 1915, 34 per cent. in 1914, and 33 per cent. in 1913.

The share of the various countries in the imports into and the exports from Peru in 1917 was as follows:

Imports: United States, \$42,789,713; United Kingdom, \$9,415,047; Hongkong, \$2,208,228; Chile, \$1,738,586; Italy, \$1,210,333; Australia, \$1,128,476; British India, \$1,703,392; France, \$1,094,963; Spain, \$1,783,586; Japan, \$630,187; Denmark, \$27,986; Sweden, \$93,052; Ecuador, \$308,997; Netherlands, \$59,225; Cuba, \$218,174; Brazil, \$140,774; Germany, \$20,449; Belgium, \$34,236; Portugal, \$93,115; Panama, \$98,649; Colombia, \$13,227; Uruguay, \$17,694; Norway, \$30,766; Salvador, \$144,490; Argentina, \$262,774; Mexico, \$90,308; Bolivia, \$9,640; Canada, \$7,947; All other countries, 336,343.

Exports: United States, \$53,251,224; United Kingdom, \$18,457,861; Chile, \$11,873,670; Jamaica, \$1,033,304; Bolivia, \$1,813,998.

TRADE WITH THE UNITED STATES.

The United States ranked first, and Great Britain second, among the countries from which Peru obtained its imports during the four-year war period, 1914-17. Two countries, Germany and Belgium, ceased to be important sources of supplies, and three new countries, Spain, British India, and Japan, took their places. Over half the imports from Spain consisted largely of textiles, principally cotton. The rest consisted largely of foodstuffs, such as wines and other liquors, sardines, preserved fish and vegetables, almonds, paper, and cardboard. Practically all the imports from British India consisted of jute bags for ore and sugar. Approximately one-fifth of the imports from Japan were cotton textiles. Glassware and china, rice, paper, and cardboard were included in the wide variety of products which composed the remainder.

In 1918, Perú imported American products from United States as follows:

Abrasives, \$12,499; Agricultural implements, and parts of, \$204,364; Aluminum, and manufactures of, \$21,316; Animals, \$9,125; Asbestos, manufactures of, \$28,293; Athletic and sporting goods, \$4,878.

Billiard tables and accessories, \$8,487; Blacking (including shoe paste and polish, and other), \$19,911; Brass, \$96,135; Breadstuffs, \$772,355; Bronze, manufactures of, \$21,015; Broom corn, manufactures of, \$5,341; Brushes, \$21,043; Buttons, and parts of, \$21,726.

Candles, \$1,534; Cars, automobiles and other vehicles, \$1,361,869; Celluloid, and manufactures of, \$8,501; Cement, hydraulic, \$203,745; Chalk, manufactures of, \$3,967; Chemicals, drugs, dyes, and medicines, \$1,004,255; Chewing gum, \$5,169; Clay, fire, \$2,710; Clocks and watches, and parts of, \$17,268; Coal and coke, \$397,816; Coal tar, \$4,139; Cocoa and chocolate, prepared or manufactured (not including confectionery), \$7,788; Confectionery, \$35,533; Copper and manufactures, \$127,294; Cork, manufactures of, \$2,508; Cotton and manufactures, \$2,728,782.

Dental goods, \$12,339.

Earthen, stone, and china ware, \$198,275; Electrical machinery appliances, and instruments, \$647,296; Explosives, \$480,217.

Feathers, \$3,433; Fibers, vegetable, manufactures of, \$361,642; Fish, \$251,223; Flavoring extracts and fruit juices, \$6,981; Fruits and nuts, \$55,196; Furniture of metal, \$40,221; Furs and fur skins, \$4,079.

Glass and glassware, \$219,450; Glue, \$5,352; Gold and silver, manufactures of, including jewelry, \$7,593; Grease, \$41,965.

Hats and materials for, \$30,317; Hops, \$8,217; Household and personal effects, \$7,585.

India rubber and manufactures, \$245,619; Ink, \$24,123; Instruments and apparatus for scientific purposes, \$25,093; Iron and steel and manufactures, \$5,421,906.

Lamps, chandeliers, and all other devices for illuminating purposes (except electric), \$63,200; Lead: Pigs, bars, etc., \$40,917; Leather and manufactures, \$692,524; Lime, \$4,176.

Malt, \$4,134; Matches, \$49,360; Meat and dairy products, \$1,164,909; Metals and compositions, not otherwise classified, \$51,267; Motor boats, \$11,531; Mucilage and paste, \$5,649; Musical instruments, pianos, \$86,908.

Naval stores, \$77,661; Notions, not otherwise classified, \$21,615; Oakum, \$12,328; Oilcloth and linoleum, \$28,798; Oils, (animal), \$385,182; Oils, (vegetable), \$151,963.

Paints, pigments, colors and varnishes, \$132,256; Paper and manufactures, \$779,942; Paraffin and paraffin wax, \$267,580; Pencils and pencil leads, \$40,817; Penholders, \$3,264; Perfumeries and manufactures, \$138,345; Phonographs, graphophones and gramophones, \$96,152; Plated ware (except cutlery and jewelry) \$57,972; Plumbago or graphite, and manufactures, \$8,374.

Roofing felt and similar materials, \$18,972.

Seeds, \$5,942; Shoe findings, \$36,947; Silk, manufactures of, \$42,985; Soap, \$140,075; Spices, \$6,571; Spirits, wines, liquors, and other beverages, \$23,706; Stone, (including marble), \$13,875; Straw and palm leaf, manufactures of, \$7,263; Sugar and molasses, \$4,024; Surgical appliances (not including instruments), \$33,934; Suspenders and garters, \$9,577.

Tobacco, manufactures of, \$3,811; Toys, \$16,170; Trunks, valises, and traveling bags, \$2,520; Type, \$6,612; Typewriter ribbons, \$2,535; Vegetables, \$32,769.

Wax, and manufactures of, 027,137; Wood and manufactures, \$1,403,779; Wool and manufactures, \$201,358.

Zinc and manufactures, \$47,325.

In 1918, Perú exported the following products to the United States:

Antimony: Ore, \$2,180; Art works, \$6,765.

Brass, fit only for remanufacture, \$18.

Chemicals, drugs, dyes, and medicines, \$264,751; Cocoa or cacao, crude, \$2,715; Coffee, \$3022; Copper, \$23,093,548; Cotton, and manufactures of, \$4,195,501.

Fertilizers, Potash, not elsewhere specified—Sulphate of, \$748; Fibers, vegetable, and textile grasses, and manufactures of, not elsewhere specified: Unmanufactured, \$12,458; Fruits and nuts: Olives, \$37,796; Furs, and manufactures of, \$1,697.

Hair: Unmanufactured, \$1,688; Hats, bonnets, and hoods, and materials for, \$100,343; Hides and skins (except fur skins), raw or uncured, \$1,509,341.

India rubber, etc.: Unmanufactured, \$1,471,823; Ivory: Vegetable (tagua nuts), \$20,149.

Lead, and manufactures of, \$30,849; Leather and tanned skins, and manufactures of, \$8,997.

Minerals, crude, not elsewhere specified, \$77,467.

Oil cake, \$214,515; Oils, \$1,127,015; Photographic goods: Motion picture films—Negatives, \$620.

Seeds, \$2,502; Spirits: Spirits distilled, 89; Sugar: Cane, \$2,098,289.

Tin, \$771,657; Tungsten-bearing ore, \$1,455,863.

Vegetables, \$82,280.

Wax: Beeswax, \$3,463; Wool, hair of the camel, goat, alpaca, and other like animals, and manufactures of: Unmanufactured—Wool

of the sheep, hair of the camel, and other like animals, hair of the angora, \$4,634,560.

Zinc and manufactures of, \$328.

In 1913 Germany held the large proportion of the paper trade with Peru, especially in wrapping and news-print paper. But, as statistics given below show, the United States became the chief source of supply by the year 1917. The trade feels very favorably inclined toward American products and other things being equal, will favor American business.

There is a strong general demand for railroad crossties in Peru. Practically the entire supply is imported, since few accessible native woods give satisfactory wear. Preference is shown for redwood ties from California, which last from 10 to 14 years, depending on the location.

All kinds of electrical apparatus is being used for application to mining machinery and small lighting plants in Lima, Peru. Considerable building construction is under way at the present time necessitating electrical appliances. The local market for modern electrical household appliances and industrial plant labor-saving devices is still somewhat limited owing to the lack of education concerning the appliances and to the relative cheap labor available.

The first automobile to be demonstrated in Peru reached Lima in 1907, and this was soon followed by others, the majority being of European manufacture. American cars entered the field, however, and they gained the leading place even before the outbreak of the war. It was during war years that the automobile trade of Peru sprang into importance. In the last seven years the United States has exported to Peru a total of 2,076 motor cars and trucks, 90 per cent of this number having been shipped in three years. Nine-tenths of the total number were passenger cars at an average value of \$1,142. However, from 1913 to 1917, inclusive the average value of passenger cars was only \$753, while in the two last years, 1918 and 1919, the average was \$1,321. The total annual value of the passenger cars increased 1,541 per cent from 1913 to 1918.

The shipments of motor trucks to Peru were negligible until 1917. In the last three years 194 cars were shipped in contrast with the total of 10 shipped in the previous three years. The average price of the trucks shipped since 1916 was \$2,037. The shipments of parts have increased more than the exports of trucks or motor cars, and the exports of tires have multiplied even faster, the 1919 shipments of tires having been 228 times the 1913 shipments. The trade in motor cycles has been comparatively small, a total of only 51 machines at an average value of \$200 having been shipped to Peru in the last six years, nearly half of this number going in 1917.

The United States has the largest share of the Peruvian automobile trade since 1912.

The President issued a decree on the 19th of August preventing the exportation of alfalfa seed as a protective measure for insuring sufficient feed for stock.

A decree was issued in December, 1919, restricting the exportation of raw cotton, cotton seed, cotton seed oil, and cotton

seed cake, to continue until in the opinion of the Government the needs of Peru have been satisfied. Licenses to export cotton seed will be granted only when the manufacturers of cottonseed oil have indicated that they have purchased or contracted for their year's requirements at a price not in excess of 3.50 soles per quintal of 101 pounds. Licenses to export cotton seed are subject to a tax of 1 sol per quintal, with certain deductions if the freight rate exceeds \$14.60 per ton. The decree also fixes maximum prices for domestic transactions.

SHIPPING.

The Peruvian Steamship Company has a fleet of five modern steamers, and maintains a weekly service between the Peruvian coast ports and Panama. The Lamport and Holt Line, Gulf Line, and Roland Line make sailings from England to Peru. The Merchants Line, West Coast Line and the New York and South American Line connects the United States to west coast ports for and with freight. The Oriental Steamship Company (Japanese) connects Peru with the Orient. There are passenger and freight steamers from New York and Europe to Iquitos on the Amazon River. None of these services, however, is observing a schedule.

The Compagnia Transatlantica Italiana, of Genoa, inaugurated a new service of steamers between Italian ports and Peruvian and Chilean ports, via Panama Canal. The first steamer to depart from Genoa for this coast was the *Ansaldo San Giorgio*, of 12,000 tons.

The net profit for the six months period from January to June obtained by the Peruvian Steamship Co. and Callao Docks amounted to 503 Peruvian pounds.

The Government vessel, *Quiruvilca*, constructed in a dockyard at Callao, was launched in February 1919 in the port of Callao.

At all the ports of the Peruvian coast, ships are served by lighters drawn by gasoline boats. Every passenger and every pound of freight are handled by them, except in very rare instances of the use of the pier at Callao. The motors used range in power from 6 or 8 horsepower to 50 or 60. At the open roadsteads, characteristic of the Peruvian coast, strong seaworthy hulls are essential, with fairly powerful engines.

The works of the port of Pacasmayo were damaged as a result of an excessively high sea which late in October 1918 washed away the principal part of the pier, together with the cranes and other handling devices. While much damage resulted, the Peruvian Government took steps promptly to make necessary repairs.

CUSTOM REGULATIONS.

The following data will be of use to American exporters:

Shippers to Peru must present for certification an invoice in quadruplicate, made out in Spanish and stating; name of shipper, port of destination, consignee and vessel; marks, numbers, number and kind of packages, contents, ad gros ad net weight, in kilograms, of each package. Invoices must be sent with bills of

lading, or, with parcel receipts from the ship company. Shipments may be consigned direct or "to order." No alterations or erasures are allowed in invoices, but corrections may be made by means of separate letters in quadruplicate, certified by the consul. A special manifest is required for transshipments in Peru to a foreign port, and this circumstance must be mentioned in the invoice. Shipments of plants, seeds, and animals must be accompanied by health certificates, certified by the consul. Shipments of lard must be accompanied by the certificate from the Department of Agriculture's inspectors. The consular fee for certification is \$2.00. Packages should show gross weight. Callao and Mollendo are the only ports where explosives, firearms, etc., may be imported without special permit. Consular blanks cost 30 cents per set of four. The fee certifying a set of invoices is 2 per cent. of value of the invoice. Extra copies of the invoice may be obtained at \$1. There is no charge for certification of bills of lading.

Peru has consulates in the following cities: Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Los Angeles, Cal.; Mobile, Ala.; New Orleans, La.; New York, N. Y.; Norfolk, Va.; Philadelphia, Pa.; Portland, Ore.; Port Townsend and Puget Sound, Wash.; San Francisco, Cal.; St. Luis, Mo.; Toledo, Ohio.

An executive decree of May 22, 1918, prohibited exports of cattle, sheep, goats, and hogs from Peru on and after July 31 of the same year.

A law of January 10, 1918, established an additional surtax of 2 per cent. on merchandise imported through the customhouse of Mollendo and Callao, Salaverry, Paita, and Pasco. The surtax collected at Mollendo and Ilo are for use in the construction of waterworks and sewers in the cities of Arequipa, Puno, Abancay, Moquegua, and Mollendo.

The Government of Peru has decided to establish a Bureau of Commercial Information in Lima equipped with as complete a library of trade information as possible. This bureau will answer inquiries of an industrial or commercial nature, and will furnish data to persons interested in the resources and industrial development of Peru. The Spanish address of the new bureau is "Ministerio de Fomento, Sección de Industrias, Lima."

For the purpose of reducing the high cost of living the exportation of coffee was suspended from July 23 until the local price was sufficiently reduced, when there will be charged an export tax of \$1.46 per quintal.

In addition to the regular duties, as above quoted, there is a surtax of 10 per cent. of the duties collected on all imports at the ports of Callao, Salaverry, Paita, and Pisco, and a surtax of 8 per cent. at all other ports; also one-fifth of 1 centavo per kilo gross weight on all goods entering the customs warehouses at Callao and Mollendo.

Shipments, if possible, should be made via parcel post, as deliveries are made more rapidly and there is less danger of loss.

The decree issued September 19, 1919, by which the export tax on hides and skins was increased, was revoked by a decree of October 17 and the old rates of 1½ cents per kilo on fresh hides, and 2½ cents per kilo on dry hides are again in effect.

The increase in export duties was effective in accomplishing the desired result, which was to reduce the prices of hides and skins for domestic use. Exporters were warned that if prices to be paid by domestic tanneries increase the prohibitive export duties will again be enforced.

The import duty on rice in Peru has been reduced 50 per cent, following out the scheme to reduce the high cost of living. Exportation of rice of ordinary quality has been suspended until the local retail price averages 0.15 sol per kilo for at least two months.

The export duty on all grades of wool is 2 shillings per Spanish quintal of 100 pounds, gross weight, when first quality Arequipa washed wool is quoted in Liverpool at 14c. per pound, in addition to the 10 per cent. on gross value, according to grade, of the exported wool.

FINANCE.

A syndicate called the *Compañía Recaudadora de Impuestos* (Tax Collecting Company), collects the dues on alcohol, opium, tobacco, stamped paper for official uses, legacy and property transfer dues, etc. It began operations by making a loan to the Government as a condition of its contract, of \$6,225,000 on April 1, 1913, at 7 per cent. interest yearly.

The Company retains \$115,000 for administration expenses, as also 1 per cent. of the profits.

The government generally expends each year the total revenues.

Import duties bring about 30% of the revenue; export duties make up 40%, and internal revenues produce about 25%.

However, the budget for 1916 estimated the receipts in sols at 30,970,290 and the disbursements at 31,098,070. The actual receipts were 8,550,370 sols more than the estimated ones, and the actual expenditures 1,055,470 less, or an excess of receipts over expenditures of 7,367,120 sols. The year 1917 was a favorable as the previous year, inasmuch as during the first half of same here was an excess of receipts over disbursements of 4,661,190 sols.

The total fiscal receipts for the year 1918 were 1,675,767 pounds or 91,065 pounds more than in 1917, in which year the total receipts exceeded those of the preceding by 77,278 pounds.

The budget for 1919 estimated the receipts and expenditures at £5,169,147, distributed as follows: Ordinary receipts £3,972,997; extraordinary receipts, £1,196,150; total ordinary expenses, £2,680,767, distributed in the following manner: Government, £663,690; foreign relations, £52,765; justice, £314,732; treasury, £454,304; war and navy, £806,064; industry, £418,209. Extraordinary expenses, to the amount of £2,286,570, distributed as follows: Government, £22,414; foreign relations, £19,955; justice and public instruction, £469,065; treasury, £1,386,103; war and navy, £34,444; industry, £355,587; and expenditures for the National Congress, £201,809.

Payments on the various public debts and obligations were given as follows:

Year.	Amortization	Interest.	Total.
1915	£p. 67,939	£p. 83,365	£p. 151,304
1916	386,766	296,461	683,227
1917	747,503	294,397	1,041,900
1918a	152,261	92,259	244,520
Total	1,354,469	766,482	2,120,951

In 1916 a commission was appointed to investigate the claims arising from the unpaid balances of the budgets from 1908 to December, 1915, and the legality of other obligations included in the floating debt. In order to settle the most urgent of the outstanding claims which the commission pronounced valid and to provide funds for public works, Congress authorized the issuance of £p. 2,000,000 bonds of the internal consolidated debt to bear 7 per cent interest and 1 per cent amortization, cumulative. This law was passed early in 1918.

DEBT.

A law of December 14, 1918, authorized the President of the Republic to contract a loan of £300,000, bearing interest at the rate of 7 per cent. per annum. Provisions are made for payment by lot at par and for an annual accumulative sinking fund of 1 per cent. The proceeds of the loan are to be used in the construction of the Jatunhuasi Railway.

The two branches of the Peruvian Congress have passed a bill authorizing the President in conjunction with the municipality of Lima to contract a loan of £1,000,000 (\$4,866,500) with national and foreign capitalists, for the purpose of improving the water supply, sewerage, and pavements of the city of Lima. The bonds are to run from 15 to 30 years, bearing interest at 7 per cent. It would seem from the wording of the bill that they may be sold as low as 94 per cent. on the dollar. Certain taxes are provided to meet the interest, including the water taxes.

The only Peruvian city that has any external debt is Lima, which sold in London an issue of 600,000 5 per cent. Provincial Council First Mortgage Bonds. These bonds receive interest January and July, this interest being payable in New York, London, and elsewhere. The loan is secured by a first mortgage on market, abattoir, warehouses, exhibition grounds, etc. The sinking fund is $\frac{1}{2}$ %. The other debt of the city amounts to approximately \$30,000.

BANKING.

Here follows a list of banks operating in Peru: Bank of Peru and London (Banco del Peru y Londres), established 1863-1877, capital and reserves £p809,403; Caja de Ahorros (Savings Bank), established 1868, capital and reserves, 71,492; Italian Bank, (Banco Italiano), established 1889, capital and reserves, 354,960; International Bank of Peru (Banco Internacional del Peru) established, 1897, capital and reserves, 125,503; Popular Bank of Peru (Banco Popular del Peru) established, 1899, capital and reserves, 214,690; Bank of Deposits and Consignments (Caja de

Depósitos y Consignaciones), established 1905, capital and reserves 119,313; German Transatlantic Bank (Banco Aleman Transatlantico) established 1905, capital and reserves 200,000; American Mercantile Bank of Peru (Banco Mercantil Americano del Peru) established 1916, capital and reserves 102,426.

The Anglo-South American Bank, Limited, will shortly open a branch office in Lima. The headquarters of this institution is London and it has branch offices in New York, Paris, and some of the principal South American cities.

The State of the Peruvian Banks for the first half of 1919 was as follows: The banco del Peru y Londres, on June 30, presented a balance of £10,276,670 with £140,446 gold and £49,010 silver on hand in its vaults. The Savings Bank of the Public Beneficence of Lima in its statement of July 31 presented a balance of 1,255,613. The mortgage and loan section presented a balance of 130,688. The Banco Internacional del Perú on July 31 published a balance of 1,332,436, having 109,006 in gold on hand. The loan section showed a balance of 27,175. The Banco Aleman Transatlantico, on June 30, showed a balance of 3,046,358; of this total 106,051 were gold pounds and 2,992, pounds silver.

The four banks in Lima which participated in a £3,000,000 bond issue recently made by the Peruvian Government were authorized to open accounts in the London & Midland Bank, Lloyds Bank, and the London County Westminster Bank for the sum of £600,000, to be used in meeting the drafts of exporters as well as those who deliver drafts to the Peruvian Treasury.

The Peruvian currency law, which became effective in September 1918 and fixed the legal rate at which all transactions in exchange on New York and London must be transacted, has stabilized the exchange situation, and the few local banks which agreed to take part in the issue were obliged to buy drafts at the following rates:

Sight drafts on New York, 5.03% per Peruvian pound.

Drafts on New York at 90 days, \$5.113 per Peruvian pound.

Sight drafts on London, 5% per cent. discount.

Drafts on London at 90 days, 7% per cent. discount.

The stabilized rate provided by the new law was closely maintained by the five banks and the principal business firms in Peru.

On the 1st of June, 1919, the metallic reserve held by the banks of Lima amounted to 2,289,748 Peruvian pounds. Of the amount held in Lima, 511,666 pounds were in gold, and 82,528 were in silver, while 1,695,554 pounds were deposited in foreign banks.

On April 1, 1919, a savings department was established in the Lima branch of the Bank of Peru and London, in which deposits may be made from 1 sol upward, at 5 per cent annual interest.

BANKING HOLIDAYS.

January 6, Epiphany—February 2, Purification—February 16, Monday before Lent—February 17, Tuesday before Lent—March 19, San José (St. Joseph)—March 25, Annunciation—

April 1, Holy Thursday—April 2, Good Friday—April 3, Holy Saturday—May 13, Ascension Day—June 3, Corpus Christi—June 29, St. Peter and St. Paul—July 4, American Independence Day—July 28 and 29, National Holidays commemorating Independence—August 15, Assumption—August 30, Santa Rosa (St. Rose of Lima)—September 8, Nativity—September 24, Nuestra Señora de la Mercedes (Our Lady of Ransom)—October 12, Discovery of America—November 1, All Saints' Day—December 8, Immaculate Conception.

MONEY.

Gold became the only standard by Act of December 14, 1901. The libra is the national gold coin and is equivalent to the pound sterling. Silver is legal tender up to 100 soles. Silver coins are the Sol (10 soles—1 libra), $\frac{1}{2}$ sol, 1, 10 sol, and 1-20 sol. Bronze coins are 1 and 2 centavo pieces (\$100 centavos—1 sol.)

There has been an insufficiency of circulation, with the national currency estimated at only about 25 million of soles. When the United States entered the war and prohibited the exportation of gold, that act disturbed Peruvian affairs. Exporting industries needing millions of soles with which to meet their monthly pay-rolls, were required to pay such prices for New York exchange as entail a discount of 18 to 20 per cent. of their paper.

The Government ordered minted in the United States 7,000,000 copper coins, 4,000,000 of the denomination of 1 cent, and 3,000,000 of the denomination of 2 cents, in order to provide the people with fractional coins.

A bill was passed to Congress in Sept., 1918 which authorized the issue of £p. 3,000,000 of cheques circulares (a kind of paper money guaranteed by funds deposited in New York and London to the order of a supervising board, as well as by gold and securities held in Lima. The Federal Reserve Bank of New York was designated as the central depository, and the rate at which the guaranty deposits were to be made was fixed at \$4.866 per Peruvian pound. The cheques were to be issued in denominations of 10, 5, and 1 pounds and 1 and 5 soles. The law also prescribed an arbitrary rate of exchange to be adhered to by all banks and private firms engaging in exchange transactions, this rate to be based on the price of \$5.01 $\frac{1}{4}$ per Peruvian pound for cable transfers on New York.

The recently established American bank did not participate in the issue of cheques circulares, and existing conditions prevented the Banco Aleman Transatlantico from taking part. The four other mercantile banks of Lima subscribed the following quotas: Banco del Peru y Londres, £p. 920,000; Banco Italiano, £p. 920,000; Banco Popular del Peru, £p. 630,000; Banco Internacional del Peru, £p. 530,000; a total of £p. 3,000,000.

The terms of the law which authorized the second issue of the cheques circulares were such that virtually all the gold reserves of the banks, except those required to cover the sight deposits, were commandeered by the Government to be deposited with the Junta de Vigilancia to increase the gold guaranty of the paper currency issued.

The law concerning the delivery of gold to the Supervisory Board, provided that the order to deliver all available gold, should be extended to apply to all banks, whether specified by the law or not, referring not only to the gold on hand, but also to all that which might enter the country while the law in force. The surrender of the gold was independent of its issuance and the supervisory board would give checks in payment for it. The new law amplified the authority granted to the President to enter into agreements with the United States Government whereby interest-bearing notes or bonds or the treasury of the United States may be deposited in the Federal Reserve Bank, in case the United States Government contracted to return the deposits at par in gold when the prohibition on gold exportation had been removed. It further provided that the Peruvian Government might not purchase such bonds without the previous signing of a convention containing these stipulations. The delivery of silver money through banks was also regulated, and the amount of gold coin that might be carried out of the country by an individual was limited to 10 pounds.

The trade balance accumulated by Peru during 1916 and 1917 increased the net gold imports tremendously. Part of this gold was imported as money and placed directly in circulation, and part was coined and placed in circulation; but the greater portion was retained by the Junta de Vigilancia to increase the gold guaranty for the cheques circulares and by the banks to increase their gold reserves.

Provision for the withdrawal of the paper currency issued in Peru during the war and for the transfer to Peru of the gold deposited abroad as guaranty for this paper currency. These provisions were modified by an act passed by the Assembly and approved by the President.

This act reads:

1. When the international financial situation caused by the recent war shall have returned to normal, the President shall confer with the Junta de Vigilancia (the Government organization created to superintend the issue of paper currency to the banks and to take charge of the guaranties required of them), and shall determine in what manner and at what times the following operations shall be carried out: (a) The withdrawal of the paper money issued during the war. The original act sanctioning such issues provided for their retirement within six months after the end of the war. (b) The transfer to Peru of the gold deposited in foreign banks as guaranty of this paper currency. The act authorizing such deposits abroad decreed that they were to be transferred to Lima as soon as the gold-export embargo should be lifted by the United States and England, and that said gold was to be deposited in the Junta de Vigilancia to increase the gold guaranty of the paper currency. (c) The control of the delivery to the Junta de Vigilancia by the banks issuing paper currency of either gold or paper currency which would enable them to withdraw equal amounts from the gold guaranties deposited abroad. Such delivery had been sanctioned by the original act authorizing the deposit of the gold guaranties abroad.

RAILWAYS IN OPERATION.

Peru does not possess a real railway system. The railways are slowly pushing their way across the coastal belt and already two lines, the Central and the Southern, scale the mountain barrier and tap the mineral region of the Andean plateau but no railway has yet penetrated farther east than this. There are only three short sections of longitudinal railroad in Peru; one in the southern part of the plateau section; one in the central part of the plateau section; and one from the port of Callao north along the coast. The ocean is still the only highway available for travel from north to south.

With the exceptions of the two lines which penetrate the Andean plateau and the three short stretches of longitudinal road, the railways now in operation are short, isolated lines extending from Pacific ports short distances up the river valleys and have but a single function, the connection of interior points of a special river valley with its ocean port.

The following list includes the railways in operation and gives a few details of each; location, length, and equipment. There are some thirty lines listed and only six of this number are over 100 kilometers in length. Practically all of the railways begin at a Pacific port and follow the course of a river inland. The gauges vary from 1.44 meters to .60 meters.

Tumbes Railway, from Pizarro to Tumbes, chief town of Tumbes Valley, 11 kilometers.

Paleta to Piura Railway from Paleta up Chira Valley to Sullana; south to Piura Valley; down this Valley to Piura, 97 kilometers; equipment, 6 locomotives, 7 passenger cars, and 43 freight cars.

Piura to Catacaos Railway, from town of Piura down Piura Valley to Catacaos, 10 kilometers; equipment, 3 locomotives, 11 passenger cars, and 14 freight cars.

Bayovar-Reventazon Railway (private.) from Bayovar to sulphur mines at Reventazon, 48 kilometers; equipment, 2 locomotives, and 24 freight cars.

Pimentel-Chiclayo Railway, from Pimentel to towns to Chiclayo, and Lambayeque, 24 kilometers; equipment, 2 locomotives, 4 passenger cars, and 24 freight cars.

Eten, Chiclayo, Ferrenafe Railway, from Main line: Pimentel to Chiclayo, Lambayeque and Ferrenafe, 43 kilometers; equipment, 8 locomotives, 15 passenger cars, and 80 freight cars.

Branch: Chiclayo to Patapo, 24 kilometers.

Branch: Pimentel to Pomalca, 28 kilometers.

Eten-Cayalti Railway, from Eten to Cayalti in Sana Valley, 36 kilometers; equipment, 3 locomotives, 2 passenger cars, and 10 freight cars.

Pacasmayo Yonan Railway, from Main line: Up Jequetepeque Valley to Yonan and Chilte. Branch: North from Calasnique to Guadalupe, 27 kilometers.

Huanchaco Tres Palos Railway, from Main line: Huanchaco north to Tres Palos, 14 kilometers; equipment, 2 locomotives, 1 passenger car, and 22 freight cars.

Trujillo Railway, from Salaverry north to Trujillo, Chicama and Chocape, hence inland to Ascope, 76 kilometers; equipment, 13 locomotives, 20 passenger cars, and 170 freight cars.

Chicama Pampas Railway (private.) from Chicama up Chicama Valley to Pampas, 45 kilometers.

Trujillo-Laredo-Menocucho Railway, from Trujillo up Santa Catalina Valley to Laredo. Branch: Laredo to Menocucho, 25 kilometers.

Chimbote-Tablones Railway, from Chimbote up Santa Valley

through Tablones to La Limona 104 kilometers; equipment, 3 locomotives, 3 passenger cars, and 24 freight cars.

Supe-Barranca Pativilca Railway, from Supe north to Barranca in Supe Valley and to Pativilca in Pativilca Valley, 12 kilometers; equipment, 1 locomotive, 3 passenger cars, and 8 freight cars.

Rio Pativilca to Paramonga Railway, from Short extension to hacienda Paramonga, 7 kilometers; equipment, 3 locomotives, 1 passenger car, and 13 freight cars.

Supe-San Nicholas Railway, from Supe to hacienda of San Nicholas, 6 kilometers; equipment, 2 locomotives, 2 passenger cars, and 4 freight cars.

Reparticion to Alpas Railway, 25 kilometers.

Northwestern Railway, from Ancon north to Huacho, 141 kilometers. Up Huará Valley to Sayan, 55 kilometers. Huacho to Port Huaral, 1 kilometer. Port Huaral to Chancay, 13 kilometers.

Playa Chica-Salinas Railway (private), from Huacho to salt works, 10 kilometers.

Chancay-Papla (private) Railway, from Chancay up Chancay Valley to hacienda of Palpa, 25 kilometers; equipment, 4 locomotives, 5 passenger cars, and 24 freight cars.

Lima Railways Co., from Callao to Lima and short branches from both cities, 41 kilometers; equipment, 20 locomotives, 38 passenger cars, and 300 freight cars.

Central Railway, from Callao through Lima up Rimac Valley and coastal mountain range to Oroya, 22 kilometers; equipment, 55 locomotives, 62 passenger cars, and 520 freight cars. Oroya south along Andean Plateau to Huancayo, 124 kilometers. Ticlio on Orpaya section to Morochoca, 15 kilometers. Lima north along coast to Ancon, 23 kilometers.

Cerro de Pasco Railway, from Oroya north to copper mines of Cerro de Pasco Co. 175 kilometers; equipment, 10 locomotives, 7 passenger cars, and 230 freight cars.

Casapalca El Carmen Railway (private) from El Carmen mines to station on Central, 4 kilometers.

Lima-Lurin Railway, 30 kilometers.

Cerro Azul-Canete Railway, from Cerro Azul to town of Canete in Canete Valley, 10 kilometers; equipment, 5 locomotives, 4 passenger cars, and 93 freight cars.

Tambo de Mora-Chincha Railway, from Tambo de Mora to town of Chincha, 12 kilometers; equipment, 2 locomotives, 3 passenger cars, and 8 freight cars.

Pisco-Ica Railway, from Pisco to town of Ica Valley, 74 kilometers; equipment, 6 locomotives, 9 passenger cars, and 18 freight cars.

Southern Railway, from Mollendo through Arequipa and Juliaca to Puno on Lake Titicaca, 524 kilometers; equipment, 50 locomotives, 41 passenger cars, and 347 freight cars. Juliaca north along Andean Plateau to Cuzco, 340 kilometers.

Ensenada Pampa Blanca Railway (private) from Ensenada town, on Southern to hacienda in Tambo Valley, 20 kilometers; equipment, 2 locomotives, 4 passenger cars, and 32 freight cars.

Ilo-Moquegua Railway, from Ilo up Moquegua Valley to town of Moquegua, 100 kilometers; equipment, 3 locomotives, 3 passenger cars, and 8 freight cars.

In 1890, the entire foreign debt of Peru was taken over by the London Corporation of Foreign Bondholders and in return the Peruvian Government granted that organization certain concessions including the control of all State railways for a period of 66 years. In 1907, a new contract was made between the Peruvian Government by which certain disputes were adjusted. The railway lease was extended for seventeen years during which time the Government was to receive 50% of the net profits resulting from the operation of the railways after the service of the Corporation's railway bonds had been met.

The Peruvian Corporation controls about 1,300 miles including all the more important lines of the country with the excep-

tion of the Cerro de Pasco Railway. They are: Central Railway, Southern, Trujillo, Palta, Pacasmayo, Pisco de Ica, and Chimbote.

The extensions of the Central to Huancayo and of the Southern to Cuzco were constructed by the Corporation. The Government will provide the necessary State land for further construction work and will allow the Corporation to import construction and repair machinery free of duty. According to this contract, the Corporation has the right to build and own in perpetuity a railway extending from the right on one of the State lines to a point on one of the navigable rivers of the interior. The Government will furnish the land for this line and will give the Corporation 6,000 hectares of land for each kilometer completed.

The Peruvian Corporation has a capitalization of £16,500,000 of which £9,000,000 has been issued as ordinary stock and £7,500,000 as 4% preference stock.

According to the report covering the year ending June 30, 1918, the Peruvian Corporation enjoyed the most favorable period since the war began, profits amounting to \$1,745,078. Railway net revenue increased enormously, due to high freight rates and heavy traffic over the lines; the Government of Peru paid the annuity, \$535,315, and \$145,995 on the amount of arrears due.

The dividend received was better than any distribution since the 2 per cent. in 1912-13. An additional 2 per cent. interest was paid on the debentures, and the usual \$262,791 allotted for debenture amortization.

The Government owns and operates on its own account three short lines which have been built since the 1890 agreement with the Peruvian Corporation. These lines are the Tumbes Railway, the Ilo-Moquegua and the Lima-Lurin. According to the State budget for 1918-19, the net receipts of the Tumbes for the coming year were estimated at Lp. 500; of the Ilo-Moquegua at Lp. 3,400; and of the Lima-Lurin at 3,600.

The Lima Railways Company and the North Western Company are English; the holdings of the former are operated by the Lima Light, Power and Tramways Company. The Cerro de Pasco Railway is owned and operated by the American Mining Company of the same name. The Chicama to Pampas Railway is owned by the Casa Grande Company and is the only German owned railway in Peru. The other railways are owned by local companies or individual planters.

Work was commenced in July 1919, on the construction of the Chuquicara Railway, a branch of the Chimbote Railway, which leaving this line at kilometer 75 will run in a northerly direction up the valley of the Chuquicara River, with its immediate objective the Ancos coal fields, 25 kilometers (15½ miles) distant. Ultimately the line will pass within about 30 kilometers of the Magistral copper district, through the town of Santiago de Chuco, within 10 kilometers of the Chimborazo copper deposits, and through the towns of Huamachuco and Cajabamba. This region and that lying still further to the northward is one of the richest mineralized sections of Peru.

The contract for the construction of the 25-kilometer section from Chuquicara to Ancos was secured by Messrs J. T. Glidden

and Frank Fiorani, and they expect to complete the section by the beginning of 1921.

The financing of this extension is being carried on by the Government with a portion of the revenue from the tobacco monopoly. The entire revenue of this monopoly was allocated to railway construction by the railway law passed by Congress in 1918. At the present time about 20,000 Peruvian pounds (97,330 at normal exchange) a month is being obtained from the tobacco for railway construction, and of this sum 8,000 pounds is being spent on the Chuquicara extension.

By a Government decree dated December 27, 1918, Mr. Felipe Marinovich has been granted a concession to make surveys for the construction of a railway from the town of Sayan, the present terminus of the Northwestern Railway of Peru, to Sayan, via Huacho, operated by the Peruvian corporation, to the Checras coal fields.

The preliminary plans are to be presented within one year. The Huaron Mining Co. has been authorized to build within the next two years a 0.75 meter gauge railway from Shelby, on the Oroya to Cerro de Pasco line, to the San José smelter near the village of Huayllay.

A decree issued by the President on February 5, 1919, created the Peruvian Railway Construction Co., organized to construct railways. The company is capitalized £300,00 divided into 30,000 shares of £10 each.

A commission of the Bolivian Government has begun the survey of a route for the proposed railway from Puno, Peru, around Lake Titicaca to Guagui, Bolivia. The building of this road would mean the elimination of two transshipments of goods entering Bolivia from Mollendo, Peru, and would result in competition with the Africa La Paz Railway of Chile, which is now the more direct and cheaper route.

A resolution dated January 30, 1920, authorizes preliminary surveys for a tramway in Peru to connect the towns of Chorrillos, Barranco, Miraflores, Magdalena, Bellavista, and La Punta, and provides that these surveys must be handed in to the Ministry of Public Works within 6 months from the above date. The present tramway does not serve the entire city of Lima, nor the suburbs.

The Lima to Lurin railway, the construction of which was commenced under the administration of President Billinghurst, was completed and opened to traffic during the latter part of 1918. The road is 46 kilometers long.

Congress has authorized the executive power to build a branch railway from kilometer 76 on the Chimbote to Recuay line to Cajabamba.

A contract has been let for the completion of the ninth section of the Trujillo to Quiruvilca Road, 17 kilometers, 800 meters, in extent, between Quirihuac and Quirivilca, at a cost of £3,087.

The Peruvian Government is at present considering the construction of a railroad which is to reach the region of navigable rivers in the north, affluent of the great Amazon.

This will make possible the shipment of goods from Callao

on the Pacific to ports on the Amazon, to be transferred thence to steamers bound for Atlantic ports. The new line, starting at a point on the Cerro de Pasco railroad, which runs from Lima to the Cerro de Pasco copper mines, will open extensive virgin forests of valuable timber.

The proposal to construct a railway from Callao, the principal port of Peru, to the important rubber center of Iquitos has been revived.

The President has been authorized by Congress to close and settle accounts and compromise upon questions pending with the concessionary Lima-Huacho Railway Co. and to organize a federal company modifying the proposed route so as to lead directly to the capital in a straight line.

INTERNAL COMMUNICATIONS.

It is estimated that there are from 3,000 to 4,000 miles of rivers in Peru, navigable for vessels of from 8 to 20 feet draft.

Lake Titicaca, on the boundary line between Peru and Bolivia, is the largest lake in Peru, and the highest in the world navigated by steamers. Other lakes in Peru proper are: Lake Chinchay-Cono, 37 miles long by 7 miles wide, situated at an altitude of 13,800 feet, and Lake Lauricocha, 14,270 feet and said to be the source of the Amazon River.

POSTS AND TELEGRAPHS.

Peru has about 7,900 miles of telegraph lines, with 152 offices; 3,000 miles of telephone lines with nearly 200,000 miles of wire. There are wireless stations at Callao, Pisco, Chala, Ilo, Lima, Leticia, El Encanto and Orellana.

Regular postal service is in operation. Peru belongs to the Postal Union.

The Central and South American Telegraph Co. has decided to lay additional cable between Callao, Peru, and Santa Elena, Ecuador, connecting at the latter point with the cables now running to Salina Cruz, Mexico, and thence by land across Mexico to Vera Cruz, from which city the cables run to Galveston.

The Peruvian Postmaster General has been authorized to ask for tenders from several European and American firms for the establishment of aerial routes for transportation of mail, passengers, and freight. It is proposed to establish a service between Tarma and Iquitos, and to extend this service to other sections of the mountains, if it proves satisfactory.

INSURANCE.

The principal Insurance Companies, with their capital in Peruvian pounds are: *Compañía Internacional de Seguros del Peru*, Lp200,000; *Compañía Seguros Rimac*, Lp250,000; *Compañía de Seguros Italia*, Lp200,000; *Compañía de Seguros La Nacional*, Lp250,000; *Compañía de Seguros La Popular*, Lp200,000; *Compañías Unidas de Seguros*, Lp500,000.

The latest fire and marine insurance company to be organized

is "La Peruana," with an authorized capital of 200,000 Peruvian pounds, of which amount 15 per cent. has been paid up.

The business of Insurance Companies during the first six months of 1919 showed an increase in their total earnings, as follows: Gross profits, interests, and rentals, £211,064,259, as against £170,637,089 for the six months ending June 30, 1918. Reinsurance and commissions £82,780,290,909 as against £18,699,406, respectively. General and property expenses, £25,359,304 against £18,488,076. Investments in real property, £351,929,681 against £320,804,432, and funds invested in securities, £171,362,065 as against £144,895,594.

PUBLIC UTILITIES.

The principal Public-Utility Companies, with their capital in Peruvian pounds are: Empresa del Agua de Barranco, Lp20,000; Empresa del Agua de Miraflores, Lp8,000; Empresa el Agua del Paíta y Colan, Lp6,000; Empresa de Agua Potable de Piura, Lp10,000; Empresa Eléctricas Asociadas, Lp1,500,000; Sociedad Eléctrica de Arequipa, Lp375,000; Peruvian Telephone Co (Ltd.) Lp. Lima Railways (Ltd.) Lp400,000.

A company with a large capital has been formed in Lima to establish a long-distance telephone system throughout the country. To begin the service as early as possible the company has decided to commence the construction of the lines from several different points in the Republic at the same time. When these trunk lines are completed other lines will be extended to the north to Piura and Cajamarca; to the south to Arequipa, Cuzco, and Puno; and to the interior to Cerro de Pasco, Jauja, and Huancayo, thus crossing almost all of the Republic.

The annual report of the Empresas Electricas Asociadas (Lima Light, Power & Tramways Co.) for the year 1918 shows a net profit for the year of \$936,555, which has been distributed as follows: Amortization account, \$220,224; depreciation, \$318,755; dividends for 1918, \$394,153; profit and loss, \$3,421, which added to the balance of \$459,202 on this account from 1917, makes a total of \$462,623. The distribution of \$394,153 in dividends is equivalent to 6 per cent. on the capital of the company.

The National Government has appropriated the necessary sum for the completion of the highway which will connect the provinces of Lima and Chancay with those of Cajamarca, Balagonesi, Dos de Mayo, Huari, and Huamillies.

PUBLIC WORKS.

The President has been authorized by congress to construct an automobile highway which shall extend from the terminal point of the Vitor to Valle de Majes highway to the city of Chiquibamba, capital of the Province of Condesuyos.

The sum of 5,000 pounds has been appropriated for the acquisition of dredges to be employed in removing obstacles to navigation in the Amazon River and its tributaries. The national congress has authorized the construction of a branch rail-

way from kilometer 76 of the Chimbote-Recuay line at Chuquicara to Cajabamba.

In June 1919, the President authorized the building of an international bridge over the Macara River for the purpose of facilitating trade between Peru and Ecuador. As the southern provinces of Ecuador's importations amount to 500,000 soles, the bridge will be an important step in the development of commercial relations between the two countries.

The Peruvian Government made a 5-year contract with an American engineer to have charge of irrigation. Work will commence in the Province of Canete.

Recently a project has been submitted to the Peruvian Senate empowering the President to enter into contracts for the execution of the works necessary to provide Lima and 30 other towns with fresh water, drains, paving, garbage elimination, etc. The improvements contemplated involve the expenditure of some \$100,000,000.

FOREIGN INVESTMENTS.

Great Britain has furnished by far the largest amount invested in Peru by any nation. British investments in Peru amount to \$121,622,500, United States currency, including external bonds, Peruvian Corporation bonds and shares, Lima city bonds, Northwestern of Peru Railway, various sugar estates, mines, etc. American investments in the Cerro de Pasco mines International Petroleum Co., and a few minor industries, come next, with a total of about \$50,000,000. The Germans invested little in public companies. Their investments are limited to the Banco Aleman Transatlantico, some plantations (mostly sugar and cotton), and a small amount of French capital has found its way to Peru. An estimate of \$200,000,000 would probably cover the aggregate foreign investment in this country.

PRINCIPAL DEALERS.

The following list include the principal dealers in Peru:

LIMA.

Importers and Department Stores.

Luis Gotuzzo y Co., Junin 380; F. Gulda y Co., Huallaga 298; W. E. Hardt y Co., Lampa 466; Teodoro Harth y Co., Azangaro; F. Klinge y Co., Huallaga 214; S. G. Kitsutani y Co., Carabaya 368; W. y Y. Lockett, Union 624; Ludowieg y Co., Ucayali 300; T. Marsano y Co., Junin 358; Pedro Martinto, Junin 399; G. Menchaca y Co., Ica 134; G. Milne y Co., Carabaya; E. Muecke Edw., Ucayali 220; Gazata y Otten, Lima 181; National Paper y Type Co., Lampa 254; Nosardi y Co., Union 536; A. F. Orchsle, Carabaya 223; Valencia y Oliceras, Union 449; Paw Lung y Co., Pasco 382; Ph Ott y Co., Lampa 498; Pancorbo Brothers, Caillona 398; Pacific Trading Co., Peruvian Section Nueva, Lampa 415; Carosi Reiser Curion Junin 319; Wallach Rosenberg, Union 466; De Laney y Sanchez, Callao 157; San marti y Co., Ucayali 388; Soc. Anonima de los Establecimientos Americano "Gratry" Carabaya; Sociedad Anonima Belga, Junin; Fils Schmits, Ucayali 130; R. F. Sparcks y Co., Lima 196; Truel y Co., Carabaya 415; United States Steel Products Exporting Co., Carabaya 448; F. Emilio Wagner, Carabaya 466; G. Welsch y Co., Union 498; Weiss

y Co., Ucayali 383; Chong Wing On y Co., Ucayali 548; Viuda de Piedra e hijos, Carabaya 451; J. Zettel, Union 233.

Furniture.

Malherbe y Co., Camana 246; Juan Almuelle, Junin 239; Claeyssen y Co., Camana 331; Maurer Ciurizza y Co., Union 798; Kitsutani y Co., Alma de Gaspar 120; Hnos. Brou, Huallaga 432; Pedro Diaz, Plaza Inquisición; Fabrica Japonesa, La Victoria; C. A. Freyre, Canama 345; Abraham Barrera, Sandia 376; Empresa de Mobiliarios Americanos, Santa 120; Ernesto y Jorge Garcia, Callao 341; E. y A. Hokoppler, Puno; Eduardo Garcia, Callao 260; Aurelio Koechlin, Ica 338; Lizardo Leon, Ancash 213.

Jewelry.

J. Alexander, Union 522; F. Bancharo y Hnos., Huallaga 793; Carlos Costa, Union 246; A. Julio Copelo, Union 459; C. Debernardi, Huallaga 691; Janke, Union 573; G. Welsh y Co., Union; J. Zettel, Union 233; Manuel Murgula, Huallaga 150; J. M. Ringgold, Union 521; Nicolas Schettini, Abancay 381; Pedro A. Espinosa, Ica 169; Hnos. Morante, Ayacucho 170; Marcelo Paredes, Ica, 112; Carlos Roggero, Union 230; Guillermo Salinas, Union; Manuel Soto Gonzalez, Carabaya 130; E. Valverde Lizardo, Callao 223; Arturo Madueno, Callao 184; F. Antonio Soto, Ancash 165; Angel Davila, Ica 112; Nicanor Rivas, Huallaga 787; F. Umansky, Union 376.

Books.

Libreria Gil, Banco del Herrador 569; E. Rossay, Union; Juan Antonio Granda, Arequipa 112; M. Lorenzo Rego, Union 758; Sanmarti y Co., Plateros de San Pedro 388-392; Fabrega Alzamora, Union 887; Pascual Acevedo, Urubamba 341; "El Arte Católico" Huallaga 446; Juan Iglesias, Lima 225; Alfredo Altet, Chiclayo 540; Santiago Ledesma Huallaga 461.

Chemical Supplies.

Guevara y Kusel Union, Union 449; F. Dunkelberg, Huallaga 116; Empresa de timbres y aparatos electricos, Union 790; Fernando Reusche, Carabaya 554; Sommerkhamp, Puno.

Optical Goods.

Baselli y Co., Carabaya 388; L. E. Basurto, Carabaya 508; "Centro Optico", Carabaya 376; Hnos. Sshwalb, Union 568; Octavio Effio Rivea, Ancash 520.

Dry Goods.

Fabrica nacional de tejidos de Santa Catalina, Ucayali 174; Fabrica nacional de Santa Catalina, Carabaya 355; Haaker Khan, Union 455; German Loredo, Carabaya 336; E. W. Hardt, Huallaga 230; Jose La Guardia, Huallaga 174; Nestor Sáfudo, Union 356; Abraham Alonso, Carabaya 307; Mario Marinopolus, Huallaga 186; Hnos. Cabrera, Ucayali 183; Nestor Sáfudo e hijos, Union 388; Oscar Hermosa, Huallaga 521.

Hats

Aldo Borghesi, Union 657; Atilio Varé, Union 629; Roberto Martensen, Union 560; Atilio Varé, Union 683; M. Crevani, Union 234; Crevani y Co., Union 680; "El Fenix", Union 719; José Rissi e Hijos, Union 410.

Stationery.

Ernesto Rosay, Union 632; Colville y Co., Ucayali 136; Juan Newton, Union 633; Pascual Acevedo, Union 280; David Orellana, Lima 178; R. Varese, Carabaya 319.

Notions.

Eduardo Orellana, Huancavelica 664; Santiago Ahumada, Union 326; Nicolas Liorena, Union 534; Pedro Patron, Lima 139; Santos Quevedo, Union 288; Guillermo Zolezzi, Junin 1043; Carlos Argote, Union 340; Miguel Bocanegra, Carabaya 301; Agustin Crespo, Huallaga 844; Ricardo Chizua, Callao 116; Orestes Dasso, Union 296; Alfredo Espinosa, Huallaga 184; David Garfias, Union 398; Han Pie Key y Co., Uycall 605; Constantino Luna, Callao 154; Alfredo Martinez Portal, Huallaga 202; Teofilo Menendez, Piura 317. Nicanor Mongrau, Junin 956; Isidoro Orellana, Union 202; Petronilla Palacios, Ancash 508; Luis Pinto, Ayacucho 835; Enrique Roggero, Huallaga 583; Clotilde Sauri, Ancash 1087; Sotomayor y Co., Carabaya 390; Carlos Tejada, Trujillo 231; Tabuchi, Canete 415.

Watches.

C. Enrique Quiros, Uycall 502; Francisco P. Figueroa, Callao 114; Hermenegildo Alsola, Huallaga 791; Teofilo Alvarez, Piura 345; Lizardo Benavides, Trujillo 104; Miguel Cabello, Ayacucho 909; Isidoro Carcelen, Paita 265; Luis Estrada Ucayali 336; Gregorio Elguera, Urubamba 472; P. de la Fuente, Cuzco 144; Nicolas Grosi, Huallaga 774; Ferrera de la Guerra, Junin 814; Inoque, Pururo 701; Watanabe Katano, Junin 1095; Eduardo Lezundi, Azangaro 686; Augusto Luna, Junin 747; Luis Cacotera, Urubamba 418; Manuel A. La Rosa, Urubamba 490; M. Mito, Canete 364; Pablo Mathey, Ucayali 191; Juan Medina, Urubamba 424; Nacagahua, Cuzco 686; Antonia Vda. de Philippon, Ayacucho 116; S. Sakai, Ayacucho 309; Shiramine, Casma 134; Juan Vega, Junin 809; Emilio Villanueva, Urubamba 574; Francisco M. Irigoyen, Carabaya 300.

Hats.

Atilio Vare, Huancavelica 126; Angelica Aristizabal, Ancash 563; Alberto Alastriola, Camna 536; Vuda, de Gonzalez, Cuzco 114; M. T. de Malca, Cuzco 158; Luisa Mosto, Abancay 369; Sara del Rosario, Cuzco; Rosa Branciri, Azangaro 557; Julio Carbone, Lampa 268; Pedro Candela, Pasco 158; Olivia Cavassa, Trujillo 326; Manuel Chavez, Junin 694; Manuel Chaffo, Urubamba 346; Avelino Gomez, Ayacucho 959; Augusto Huaman, Paseo 150; Pacinto Luchi, Casma 128; Francisco Monica, Ancash 1045; Manuel Mujica, Trujillo 435; L. Penaloza, Pachitea 240; Carlos M. Pineda, Huancavelica 599; Viuda de C. Pinto, Chalaco 169; Luis F. Rivera, Junin 1010; Francisco Sanchez, Piura 608; Juan Teran, Huancavelica 580; Francisco Tello, Azangaro 1071.

Shoes

Hnos. Canessa, Union 208; Hnos. Borea, Huallaga 483; Emilio Curomio, Ica 165; Pigati y Gladiador, Callao 174; Gladiador, Callao 157; Jorge Meoss, Union 664; Francisco Onetto, Ancash 294; Santiago Alberti, Ancash 273; Adrian Barraza, Ancash 161; Juan Bavecstrello, Ancash 284; Juan Botto Ancash 218; Z. Bianchi, Callao 113; Y. Chung, Ancash 173; Angel Dematini, Ancash 239; Carlos E. Drago, Ancash 224 Juli Kong, Ucayali 565; Antonio Marccone, Ancash 141; Nicolas Malborg, Union 707; Francisco Onetto, Ancash 204; G. Rossi, Carabaya 540; Antonio Robossio, Union 869; Lung Sang, Ucayali 591; Pedro Torero, Ancash 214; Wachon y Co., Trujillo 331; José Azay, Urubamba 460; C. Cuadros, Ancash 609; José Cuneo, Huancavelica 188; Chong Fat y Co., Huancavelica 654; Juan Chion, Urubamba 456; Manuel Elias, Huallaga 302; Pedro León, Junin 435; Lay Chong y Co., Urubamba 442; Guillermo Marriquina, Ancash 257; Grimaldo Mendiola, Huallaga 511; Me Wo y Co., Trujillo 315; J. Maca e hijos, Ucayali 315; Pen Keen y Co., Trujillo 363; Teodoro Rojas, Ancash 245; Antonio Robossio, Ancash 482; Elias Ruiz, Carabaya 529; Son Cheng, Trujillo 343; Arturo Tang, Trujillo 344; Manuel T. Vega, Ancash 937; Roberto Valenzuela, Trujillo 202; Lorenzo Celada, Azangaro 912; José Costa, Ica 352; Juan Calmet, Urubamba 438; Guillermo Chueca, Huallaga 726; Francisco Enriquez, Huallaga 813; Manuel Elguera, Urubamba 480; Paula Viscarela Espinosa, Lampa 932; Felix

Leyva Galarza, Piura 766; Luis Jo. Pachitea 369; Cipriano Jimenez, Ayacucho 947; Trinidad Lilen, Canete 595; Saturnino Marquez, Junin 1022; Manuel Mendoza, Pachitea 153; Rufino Nufiez, Huallaga 539; Aurelio Ortiz, Camana 411; Manuel Reyes, Caylloma 478; Alberto Romero, Huancavelica 478; Mejia Rivas, Junin 337; Esteban Roman, Ayacucho 586; Victor Rojas, Lampas 269; Arturo Roquez, Urubamba 474; Benjamin Tarranzoma, Tambo 146; Wen Shing y Co., Trujillo 307.

CALLAO.

Importers and Importers.

Belmelli y Asti, Lima 206; Roberto Baker; H. Beausire y Co.; Maurer y Cuirleza; Daumert y Co.; Claude R. Davis; Lorenzo De-laude; Enrique Demutti; Angel Derossi; José Devoto; Ducan Fox y Co.; W. R. Grace y Co., Constitución núm. 4; Graham Rowe y Co., Arsenal 22; F. Guida y Co.; Harth y Co.; E. W. Harth; Evvaldo Hillman; Knell y Co.; Lochet y Co.; Juan B. Morelo; Victor Morelon; Hnos. Nosiglia, Constitución 75-79; Santiago Paridi y Co.; F. G. Piaggio, Constitución 23-25; Hnos. Sablich; Alberto Sarquille, Lima 46; Tomas Shute y Co.; C. Weise y Co., Constitución 43-45.

SALVADOR.

The area of the Republic of Salvador is estimated at 13,176 square miles, divided into 14 departments. The population on January 1, 1915, was 1,267,762. The bulk of the population constitutes aboriginal and mixed races, Ladinos of Mestizos being estimated as numbering 722,200 and Indians 234,648. San Salvador is the capital, with a population of 66,800 inhabitants. Other towns are Santa Ana with a population of 48,120; San Miguel, 24,768; Nueva San Salvador, 18,770; San Vicente, 17,832, and Sonsonate, with 17,016.

According to the Annual Statistical Bulletin of San Salvador the area of that Republic is 13,176 square miles, and the population in 1917 was 1,287,722 inhabitants of 37 persons per square kilometer.

During the year referred to there were 3,699 marriages, 49,963 births, and 34,008 deaths, or an excess of births over deaths of 15,954.

By a legislative decree, under date of September 10, 1919, the title of City has been conferred on the town of Armnia, in the district of Izalco of the Department of Sonsonate. This town, formerly called Guaymoco, has at present 13,500 inhabitants and is situated on a plateau 470 meters above the level of the sea.

GOVERNMENT.

On August 31, 1886, the Constitution of the Republic now in force was published. The National Assembly is vested with legislative power, and is composed of one chamber called for not more than 40 sessions, between the 1st and 15th of February. The President of the Republic, may, however, call extra sessions. This body has 42 members, 3 Deputies being elected for each Department by direct popular vote, for a term of one year, one for every 15,000 inhabitants. Every citizen over 18 years of age is not only entitled to, but obliged to vote.

The salary of the President, who with the Vice-President is elected by popular vote for a term of four years, is \$9,600 per annum. The President is assisted in the administration of the affairs of the country by a Cabinet of four secretaries, who, although appointed by the President, is responsible to the National Assembly.

Sr. Jorge Meléndez and Sr. A. Quiñones Molina were elected President and Vice-President of the Republic for the constitutional period from March 1, 1919, to March 1, 1923, at the elections held throughout the Republic on January 12, 13, and 14

1919. According to unofficial reports, the total number of votes cast in all the cities of the country was 185,492 for President and 89,582 for Vice President.

The newly elected President of the Republic organized the cabinet as follows: Minister of foreign relations, public instruction, justice, and charities, Dr. Juan Francisco Paredes; assistant secretary of foreign relations and justice, Dr. Miguel Gallegos; assistant secretary of public instruction and charities, Dr. Hermógenes Alvarado, jr.; minister of state, industry, and agriculture, Dr. Miguel Tomás Molina; assistant secretary of state, industry, and agriculture, Dr. Arturo Argüello Loucel; minister of the treasury and public credit, Don José Esperanza Suay; assistant secretary of the treasury and public credit, Dr. Héctor David Castro; minister of war and marine, Dr. Pío Romero Bosque; and assistant secretary of war and marine, Dr. Francisco Tomás Mirón.

MINERAL RESOURCES.

Mining in Salvador offers greater opportunities for profitable investment at the present time than any other industry of the country. The district of Metapan is one of the richest mining zones of Salvador. At El Brujo and in the neighboring sections of Valle de San Juan, El Caliche, and San Casimiro. Copper, iron, lead, silver, nickel and platinum are found in abundance. Analyses of some of these ores made in England and France gave excellent results. The ores of this region are found on the surface and their richness increases with depth.

AGRICULTURE.

Agriculture is the chief occupation of the population. The chief product is coffee, under which there are about 166,039 acres, with some 95,000,000 trees. The annual crop is estimated at 75,000,0000 pounds. Cheese, cacao, rubber, tobacco, and sugar are other agricultural products. The Government is encouraging, by bounties on exports, the growing of cotton, and also encouraging tree planting. There are about 284,013 head of cattle, 74,336 horses, 21,457 sheep and 442,980 pigs.

The Government maintains a Department of Agriculture, an agricultural school at Izalco in western Salvador with a laboratory of plant pathology, and experimental stations for seeds, fertilizers, and new varieties of plants.

Coffee is grown at heights of 1,000 to 6,500 feet, doing best at about 4,000 feet. Early estimates of the 1919-20 crop placed the harvest at 40,000 to 50,000 tons, a record crop.

Sugar is raised around Sonsonate and to some extent on the uplands. The 1919 sugar crop was estimated above the average.

Stock raising is an important industry, though the grazing land of the country is necessarily limited by the dense population.

A number of agriculturists of the department of Santa Ana have undertaken the cultivation of the castor bean plant on a large scale.

INDUSTRIES.

Salvador is developing industrially, and besides supplying many articles needed for domestic consumption it is beginning to export certain manufactured products to neighboring Latin American countries. The output of local mills embraces cotton and silk fabrics, shawls, scarfs and handkerchiefs, leather goods, such as harness, saddles, and shoes, fiber goods, including rope, hammocks, native woven straw hats, and baskets, simply made furniture and musical instruments, cigars and cigarettes, sugar, candy, rum, beer and lumber.

The United Fruit Co. has started manufacturing Banana Bread from banana flour, mixed with other substances.

FOREIGN TRADE.

The following table shows the imports and exports for 10 years in American money.

Years	Imports.	Exports.
1909	4,176,941	6,785,430
1910	3,745,249	7,297,430
1911	5,451,161	8,833,351
1912	6,774,859	8,936,794
1913	6,098,474	9,011,112
1914	4,958,624	10,796,494
1915	4,022,167	10,563,670
1916	5,823,619	11,604,751
1917	6,869,276	10,700,266
1918	6,142,698	12,399,800

The United States has the leading place in the import trade of Salvador. The United Kingdom is second in this field, sending about a quarter of the entire imports. The trade formerly held by Germany, France, and other European countries, now goes to Japan and Chile.

The following are the imports from the principal countries of origin in 1918:

United States, \$3,455,393; United Kingdom, \$1,560,348; France, \$145,738; Italy, \$56,180; Spain, \$30,924; Japan, \$204,149; China, \$19,932; Denmark, \$2,737; Sweden, \$31,426; Netherlands, \$1,676; Germany, \$3289; Chile, \$445,348; Panama, \$106,597; Mexico, \$22,453; All other countries, \$59,508; Total, \$6,142,698.

The following are the principal products exported from Salvador in 1918:

Balsam, \$132,600; Coffee, \$9,422,315; Gold in bars, \$589,505; Gold and silver in bars and other forms, \$735,150; Hats, palm leaf, \$5,050; Hides and skins: Cattle hides, Deerskins, Tanned hides, \$5,970; Indigo, \$638,595; Rice, \$17,965; Rope, \$175; Rubber, \$13,285; Silver in bars, \$13,125; Sisal, \$148,190; Sugar: Brown (panela), \$17,965; Other, \$589,090; Tobacco, \$4,310; All other articles, \$66,510; Total, \$12,399,800.

The following are the destinations of Salvador's exports in 1918:

United States, \$10,547,050; United Kingdom, \$100,920; France, \$53,315; Italy, \$19,690; Spain, \$361,590; Denmark, \$9,520; Norway, \$61,945; Mexico, \$630,290; Chile, \$352,600; Peru, \$92,600; Ecuador, \$13,440; Panama, \$29,665; Costa Rica, \$13,220; Guatemala, \$73,720; Nicaragua, \$40,335; Total, \$12,399,800.

Salvador exported the following products to the United States in 1918:

Brass, fit only for remanufacture, \$194; Chemicals, drugs, dyes, and medicines, \$406,707; Cocoa, or cacao, crude, \$8,412; Coffee, \$5,902,216; Copper and manufactures of, \$5,552; Dyewoods, \$13,918; Fibers, vegetables, etc., unmanufactured, \$194,229; Hats, bonnets, etc., of straw, \$121,812; Hides and skins (except fur skins), raw or uncured, \$33,286; India rubber, crude, \$11,339; Lead ore-lead contents, \$3,205; Leather and tanned skins, \$2,393; Oil, vegetable-fixed or expressed, \$3,013; Sugar: Cane, \$155,312.

Salvador imported the following American products in 1918:

Agricultural implements, and parts of, \$5,136; Aluminum, and manufactures of, \$674; Asbestos, manufactures of, \$2,421. Blacking, shoe paste, etc., \$5,089; Brass, manufactures of, \$9,013; Breadstuffs, \$166,478; Brushes, \$2,738; Buttons, \$2,034; Candles, \$6,676; Cars, automobiles, and other vehicles, \$104,035; Celluloid, and manufactures of, \$2,071; Cement, hydraulic, \$68,256; Chemicals, drugs, dyes, etc., \$144,561; Confectionery, \$4,490; Copper, manufactures of, \$7,631; Cotton, manufactures of \$841,738. Dental goods, \$4,974. Electrical machinery, appliances, and instruments, \$203,308; Explosives, \$73,840. Fertilizers, \$7,481; Fibers, vegetable, manufactures of, \$22,775; Fish and fish products, \$7,847; Flavoring extracts and fruit juices, \$4,654; Fruits and nuts, \$14,615; Furniture of metal, \$2,328. Glass and glassware, \$319,244; Grease, \$2,145. India rubber, manufactures of, \$51,047; Ink, \$3,388; Instruments for scientific purposes, \$3,037; Iron and steel manufactures (including machinery), \$633,744. Lamps, etc., (except electric), \$2,102; Lead, manufactures of, \$6,680; Leather, \$308,522. Malt, \$3,750; Meat and dairy products, \$86,689; Motor boats, \$4,750; Musical instruments, \$4,963. Nickel, manufactures of, \$40,549; Notions, not elsewhere specified, \$2,117. Oil cloth and linoleum, \$3,006; Oils, \$183,500. Paints, pigment, colors, etc., \$36,947; Paper, \$99,032; Paraffin, \$68,805; Pencils (except slate) and pencil leads, \$3,499; Perfumery, cosmetics, etc., \$7,391; Phonographs, graphophones, etc., and records and materials for, \$3098; Plated ware, \$2,646; Plumbago, manufactures of, \$2,620. Shoe findings, \$10,261; Soap, toilet, \$8,795; Spirits, wines, malt liquors, and other beverages, \$23,258; Stearin, vegetable, \$7,400; Surgical appliances (not including instruments), \$6,070. Vegetables, \$7,041. Wax, manufactures of, \$2,139; Wood, \$80,208; Wool, manufactures of, \$8,502. Zinc, 11,925.

CUSTOM REGULATIONS.

A consular invoice, in Spanish and in quadruplicate must accompany all shipments, and must contain name and address of the shipper, name of vessel, and of its captain, port of destination, name of the consignee, and that of the person to whose order and account shipment is made. Consular invoice blanks are furnished at the consulate. Invoices for shipments, of value

not over \$25, are certified for \$1; from 026 to \$100, \$1 plus 2 per cent. on amount over \$25; from 101 to \$500, \$2.50 plus 1½ per cent. on amount over \$100; from \$501 to \$1,000, \$8.50 plus 1 per cent. on amount over \$500; from \$1,001 to \$5,000, \$13.50 plus one-half of one per cent. on amount over \$1,000; from \$5,001 to \$10,000, \$33.50 plus one-eighth of 1 per cent. on amount over \$5,000; more than \$10,000, \$39.75, plus one-tenth of 1 per cent. on amount of over \$10,000. A visee of certificate of origin costs \$1 and the same charge is made for viseing a set of bills of lading.

Consuls of Salvador are located at New Orleans, La.; New York, N. Y.; Philadelphia, Pa.; San Francisco, Cal.

CUSTOM TARIFF.

A decree of September 19, 1919, increased the duties on imports 25 per cent. of the present schedule. The import duties are expressed in the customs tariff of San Salvador in gold dollars, but are actually paid in local currency at a fixed official rate of exchange which has heretofore been 2.80 pesos for each dollar.

A presidential decree of April 14 placed dry cheese imported from other Central American countries on the list of products which enter free of duty.

An executive decree of May 5, 1919, authorized imports of lumber, sheet iron, Roman cement, and other construction materials free of duty.

The free admission of stucco board into Salvador is provided by a decree of February 17, 1920.

In order to prevent a shortage of sugar in Salvador, its exportation has been prohibited by Executive decree of December 2, 1919. Exceptions are made. The Executive reserves the right to permit the exportation of sugar, if such exportation seems expedient, after written request has been made by those concerned.

Beginning with the 1st of November, 1919, the export of each 100 kilos of coffee was subject to an extra duty of \$1 American gold for a period of two years, and 22 centavos (gold) tax was levied for the export of each 100 kilos of silver.

FINANCE.

During the year 1918 tax receipts in the Republic totaled 10,409,018 pesos paper. Compared with the year 1917 there was a decrease of 2,076,113 pesos in tax receipts. The expenditures of 1918 were 11,699,775 pesos or 973,249 less than in 1917.

The national receipts and expenditures from January 1, 1910 to May 31, 1919, amounted to 115,445,657 and 128,261,280 silver pesos respectively, showing a deficit of 12,815,623 pesos.

The Budget approved for 1919-20 fixes the expenditures at 13,541,533 pesos and the revenue for the year at 13,360,450 pesos. This shows a deficit of 181,083 pesos.

Exceptionally large crops and good market prices in the 1919-20 season have brought prosperity to Salvador. The coffee crop now being harvested is estimated at approximately 100,000,000 pounds, and if this figure is attained it means an increase of 25

per cent over the average record. Another favorable factor is the recent establishment of a gold monetary standard in Salvador, which eliminates the disturbing effects of a fluctuating exchange and enables the country to profit definitely from the proceeds of its increased exports.

DEBT.

The foreign debt of Salvador, in Jan. 1, 1919, was as follows: Six per cent. Sterling Bonds, 1908 £1,000,000, £756,900. Seven per cent. Sterling Funding Bonds—amount issuable to the end of 1918, £178,818, Total £935,718.

The amount of the Internal Debt outstanding on January 1, 1918, was stated by the Finance Minister to have been as follows, in Salvadorean Money:—Salaries, etc., in suspense, \$365,421, Liabilities in Gold (at 150%), \$4,539,710; Liabilities in Silver, \$4,131,621, Light Deposits, \$20,863, Funds of Institutions \$147,498, Salvador Bonds (Principal and Interest) \$3,719,202, Total \$12,942,315.

The National Assembly has received a bill empowering the executive to contract a loan of \$10,000,000 to cover the deficit, pay the debts to banks, and other public expenses.

BANKING.

The principal banks in Salvador are the Banco Salvadoreño; the Banco Occidental, and the Banco Agrícola y Comercial, with a combined capital of 8,300,000 Salvadorean pesos. They are authorized to issue bank notes, and the authority on Jan. 1, 1918 was for a total issue of 16,450,000 pesos.

The total issue was guaranteed by gold (at 150 per cent. premium) and silver coin deposited in the banks to the amount of 6,622,616 pesos or 46.6 per cent. of the whole.

On August 28, 1919 the government approved the amended by-laws of the Occidental Bank of San Salvador authorizing a capitalization of £365,000 sterling, or 4,000,000 silver pesos, divided into 36,500 shares of \$10 each, and an issue of sight notes payable to bearer in silver money of legal tender up to double the of the amount paid-in capital.

The Executive power authorized the Salvadorian Bank to increase its capital to 3,500,000 silver pesos, divided into shares of 100 pesos each and to issue bank bills payable to bearer and redeemable in silver legal tender coin.

Banks in Salvador are not ordinarily expected to aid in the financing of crops. An important source of credit in that country is the agent of a foreign coffee buyer who advances sums to planters for all the necessary expenses of raising and harvesting the coffee crop.

NEW BANKING LAW.

On September 9, 1919, the national legislative assembly passed a law which established the new unit of currency called colon, based on 0.835 grams gold 900 millesimos fine, and divided

into 100 centavos. The nickel coins of 1, 2, and 3 centavos now in circulation are used now as fractional currency.

On the same day the national assembly also issued a decree by which the gold coinage of the United States of America is declared legal tender. The bank notes of the United States representing dollars in value will circulate freely in the Republic and the established banks of the country shall accept them as payment of their credits and transactions connected with exchange and drafts. The United States dollar is valued at 2 colones, represented by the present bank notes.

By a legislative decree dated September 16, 1919, the introduction of gold coins of the United States of America into the country was declared free of customhouse duties, as well as all consular fees.

TRANSPORTATION.

The railways of Salvador, aggregating a little more than 200 miles of roadway, connect most of the principal cities and ports.

The Salvador Railway, owned by an English corporation, runs from Acajutla to San Salvador, passing through Sonsonate and extending to Santa Ana near the Guatemalan frontier. A short line running from San Salvador to the suburb of Santa Tecla, a distance of $7\frac{1}{2}$ miles, is known as the San Salvador-Santa Tecla Railway. Automobile service also connects these two cities.

A railway from the port of La Union has been built to within 34 miles of San Salvador. From this point, or from the station of Zacatecoluca, motor cars convey passengers to the capital. The railway from La Union is under construction by an American company also operating the Guatemalan system, the International Railways of America, the Government of Salvador giving a subsidy of \$7,000 for every kilometer of railway constructed.

The Salvador Railway transported 375,256 passengers and 73,557 tons of freight in 1917, the International Railways carried 85,473 passengers and 43,056 tons of freight, while the San Salvador-Santa Tecla Railway carried 301,365 passengers and 2,000 tons of freight, making a total of 762,094 passengers and 118,613 tons of freight, an increase in traffic of about one-third since the 1913 record.

The gross earnings of the Salvador Railway in 1918-19 reached \$800,000.

The section of Railway between Cojutepeque and Santa Cruz Michapa was completed early in 1919.

There are 117 post offices, distributed all over the country; also 203 telegraph offices, with 2,521 miles of telegraph lines, and 176 telephone stations, with 2,074 miles of lines. Many of the telegraph offices in Salvador have been changed into telephone stations.

Between the capitals of Salvador and Honduras direct telephone communications was established.

Parcel-post conventions have been concluded with the United States, Great Britain, Spain and Honduras, and a parcel money-order convention with Spain.

The important subway telephone service was opened to traffic on January 1, 1918.

PRINCIPAL DEALERS.

The following are the principal dealers in the larger cities of Salvador.

SAN SALVADOR.

Shoes.

S. Aguilar, F. Angulo, A. Sanchez, La Antigua Mexicana; R. Baltrons, J. N. Velazquez, La Bota de Oro; C. Perez, La Elegancia; Sawyer, La Industrial; W. Valencia, La Mexicana; N. Calderon, La Moderna; D. Huerzo, La Perla.

Importers and Exporters.

J. Belette, Baruch y Co., C. Bernhein y Co., B. Borghi Daglio y Co., C. Clara D., M. y R. Cohn, Hnos. Dreyfus, Dreyfus May y Co., Gutierrez y Galvez, A. Imberton y Co.

Leather Goods.

Baruch y Co., A. Cromeyer, Barrio de Candelaria; José M. Gallardo, Marcelo Rodríguez, Barrio de Candelaria; Rodolfo Rojas, Barrio de La Vega.

Druggists.

S. Aguilar y Co., A. Avila, A. Hernandez, R. Martinez, Menjivar y Co., Hnos. Novoa, S. Ortiz J., M. Palomo y Co., D. Pineda y Co., J. Puente.

Importers and Exporters

Hno. Lewy, E. Liebe, L. Mata y Co., Mugdan y Co., F. Orellana, Rivas Soler y Co., S. Rodriguez, Hnos. Rosembium, E. Sagrera, R. Sagrera y Co., Francisco Serarols, Videgain y Co.

AHUACHAPAN.

General Merchandise.

M. Aguirre Victor M. Arango, Manuel Ariz; A. Arriaza, C. Barraza, Hnos. Cancheana, C. Chacon, C. David, L. Fagioli, R. Funes, M. Gonzalez F., Hnos. Hambum, Salomon Hasfura, Carlos Hayen, J. Iam Humberto Lanzarrotti, Nicolas Martin, A. Mazza, S. Maza, V. Merdoza, J. Molina, Hnos. Moran, S. Nasfura, P. Rivas, S. Santillana, Hnos. Valdivieso.

Hardware.

C. Clara D., E. Martinez y Co., F. Orellana, Rivas Soler y Co., E. Sagrera, R. Sagrera y Co., F. Serarols y Co., Videgain y Co.

Books and Stationery.

Armando Cahen y Co., Jaime Gonzalo, 10a. Ave. del Sur 16, Italo Durante y Co., Apartado 212; Tomás Murcia, Albino Reyes Villegas, 10a. Norte 29; Salvador Soler y Co., Francisco E. Toledo, Universal, antes Stalo Durante, Elena de Villacosta e hijas.

Furniture.

A. Acosta, 12a. Av. 15; Hnos. Alexander, S. Arriaza, A. Bermudez Hidalgo, N. Chavez, H. Palomo, J. Rivas, Morazan 13; N. Salinas.

Watches.

C. Casati, N. Escamilla, M. Liebe, Jorge Maire, Martin Oriani.

Hata.

Hnos. Acoli y de Sola, C. Bernhelm y Co., V. Beti, A. Imberton y Co.

Dry Goods.

V. de Azucena, Independencia 4; S. Campo Barrios, P. Marroquin, Ricaurte 26; P. Mas.

SAN MIGUEL.**Importers and Exporters.**

Saumuel y Antonio, J. Arguello, A. Barrereiro, H. Batarse, E. de Beneck, Conesa y Co., M. Carlas, E. Castillo, C. Castro, Celarie Demutti y Co. L. Charlaix, A. Demutti, F. Escolan, D. Flores, V. Flores, F. Funes, C. Gavio, J. Goodall, M. Hernandez, E. E. Lehud, M. Mazzini, Meardi y Co., I. Mendoza, Manent y Merino, F. G. Prieto, S. Quiros, M. Salinas, I. Suarez, S. Suay, Ugentobler y Co.

SANTA ANA.**Importers and Exporters.**

Julio Belette, Ramon Baltrona, Baruch y Co., Emilio Bellismelis e hijos, C. Bernei y Co., Borghi B. Daglio, M. y R. Cohn, Daglis y Co., Hnos. Dreiss, Hnos. Dreyfus, Dreyfus May y Co., Leon Dreyfus, L. Dretss, H. Lanzaotti, Guillermo Lexy y Hnos., Juan Luders, L. Mata y Co., Mugdan y Co., Nosiglia y Borzaghi, Salvador Rodriguez, Hnos. Rosemblun, F. Serarols, H. Sola y Co., Sidegain y Co., J. Villa de la Torre.

URUGUAY.

The Republic of Uruguay lies between the Atlantic Ocean, the Río de la Plata (River Plate), Brazil, and the Argentine Republic. It is the smallest Republic in South America, having an area of 72,153 square miles, or a little larger than the State of North Dakota.

According to the last census, the population of Uruguay, on December, 1917, was: males, 768,365; females, 638,891, total, 1,407,247.

According to the Municipal Bulletin of Montevideo, the population of that city on January 1, 1918, was 367,953 inhabitants.

The President, Dr. Baltazar Brum, took office, March 1, 1919.

The new Constitution of Uruguay which went into effect on March 1, 1919, is in substitution of the constitution of September 10, 1830, in force with some amendment for 90 years.

Many of the provisions of the old constitution are preserved in the new, but there are some very notable changes.

The balance of power between the three branches of government, the legislative, the judicial, and the executive in the main remains about what it was in the old constitution, but there is a fuller and clearer demarcation of the limits of these powers, intended to lessening friction between the three.

All power of legislation remains in the General Assembly, composed as in the old constitution, of two bodies, a Chamber of Representatives and a Chamber of Senators, the former elected directly and the latter indirectly by the people. With the exception of impeachment proceedings and bills to raise revenue which, as under the United States Constitution, must originate in the lower chamber, any legislation may originate in either the Senate or the Chamber of Representatives. The General Assembly elects the members of the high court of justice and approves or rejects all treaties entered into by the executive power. As under the British form, legislation bills may be proposed in either chamber by the executive through members of the cabinet sitting and taking part in the legislative discussion. By a vote of one-third of either chamber cabinet ministers may be called in to answer such questions as may be propounded. During the recess of the General Assembly a permanent committee of two senators and five representatives elected by their respective chambers sits as representative of the assembly in all affairs to be transacted with the executive. This committee is responsible to the General Assembly and may in case of urgency convoke the assembly in ordinary or extraordinary session. Article 176 of the new constitution provides: "It shall be within the

exclusive jurisdiction of the General Assembly to interpret or explain the present constitution."

The judicial power in Uruguay rests with the high court of justice and subordinate courts of appeal and original jurisdiction. The high court is given exclusive jurisdiction in judging all violations of the constitution.

The high court has also original jurisdiction in offenses against the law of nations and in the admiralty; in questions arising under treaties or negotiations with foreign Governments, and also in matters affecting foreign diplomatic agents.

The most notable change made in the new constitution is in respect to the executive power.

The executive is divided into two branches, or, as the new constitution puts it (article 70): "The executive power is delegated to the President of the Republic and to the National Commission of Administration." Under the old constitution the President was elected by the General Assembly and under the new constitution is elected directly by popular vote.

The powers of the President are comprehended under 24 heads, the more notable of which may be summarized as follows: To represent the State within and without the country; to preserve order at home and abroad; to exercise supreme command of the army and navy if the exercise of command in person, however, is only with the consent of a two-thirds vote of the General Assembly; to appoint and to dismiss the ministers of foreign relations, of war and navy, and of the interior together with the attaches of these ministries; to inform the legislative power as to the state of the country and the measures and reforms deemed necessary; to make concrete proposals for new laws or for modifications of old laws; to call the legislative power in extraordinary session; to appoint the personnel of the consular and diplomatic service—in the case of chiefs of diplomatic missions the consent of the Senate or of the permanent committee when the Senate is in recess is necessary; to receive diplomatic agents and to grant consular exequaturs; to declare war after resolution by the General Assembly; to take measures for public security against interior or exterior attack; to present an annual budget to the administration commission and to conclude treaties, but prior to subscribing the same the advice to the commission must be taken and the treaties must be submitted for ratification to the legislative power.

The national commission of administration is composed of nine members elected for six years directly by popular vote. As in the Senate of the United States, one-third of the membership of the commission is elected every two years. As in the British system, minority representation is provided for by plurality voting.

The powers of the administrative commission are all administrative powers not expressly reserved to the President or some other branch of the Government, especially such as relate to public instruction, public works, labor, industries and finance, public charitable and health service. The commission renders a particularized account to the General Assembly of the collection and expenditure of revenues and prepares and submits the

final general annual budget. It provides regulations for holding elections and in general exercises supervision over all matters of administration not reserved to the President.

A striking provision of the new constitution is that which prohibits the President of the Republic from leaving the national territory for more than 48 hours without the consent of the legislative power, and a like prohibition applicable to members of the administrative commission, without consent of a two-thirds vote of the full commission.

The constitution went into effect May 1, 1919.

MINERAL RESOURCES.

While manganese ores are found in many parts of the Republic, many of the deposits are of too low a grade to be worked commercially. One of the main deposits of this ore is situated near Zapucay Creek, Department of Rivera. This deposit consists of two hills of manganese ore, from which it is estimated that 80,000,000 tons could be taken out by open cuts.

The Sociedad Anonima Turberas Carboniferas de Maldonado, a Uruguayan concern, acquired in November, 1917, the rights of Argentine promoters who had in 1915 filed a claim to peat fields near Maldonado, Uruguay.

A syndicate of Argentine capitalists has purchased the "Canteras (quarries) de Gomez," situated at Carape, containing valuable deposits of lime, marble and copper.

LIVE STOCK.

The latest agricultural census reveals the fact that of the 18,692,600 hectares used in agricultural enterprises, 11,159,012 are devoted to the breeding and pasturage of cattle and 4,047,805 hectares to both agriculture and stock raising. Cattle as well as sheep raising has suffered a marked decrease, since in 1908 there were 8,192,602 cattle in the country, as against 7,802,412 in 1916, and in 1908 there were 26,286,296 sheep, compared with 11,472,852 in 1916. In 1916 there were also 303,958 hogs, 567,154 horses and 16,663 mules and donkeys. The census of 1916 showed also that ranchmen prefer Lincoln and similar English breeds to short woolled merinos.

The 1918 wool clip of Uruguay was estimated at 100,000 bales of about 1,000 pounds each. The wool is reported to be of an exceptionally fine quality and free from impurities.

In the first four months of 1919, 3,415,025 beeves, 358,119 sheep, and 7,644 hogs were slaughtered; last years' figures for a like period being 373,336 beeves, 96,265 sheep, 4,261 hogs.

AGRICULTURE.

For the last five years the area sown in hectares and the production in metric tons of the five principal agricultural crops of Uruguay are shown in the following table:

		1917	1918
Wheat:			
Area	hectares	315,549	394,949
Production	tons	146,697	355,443
Linseed:			
Area	hectares	14,525	14,725
Production	tons	3,096	8,467
Maize:			
Area	hectares	253,836	not estimated
Production	tons	173,109	
Oats:			
Area	hectares	57,284	66,863
Production	tons	27,959	53,655
Barley:			
Area	hectares	5,135	2,357
Production	tons	2,401	2,841

The production of cereals and flax for 1918-19 crop were the following: Corn, 187,523 tons; oats, 18,701 tons; flax, 12,660 tons; barley, 1,578 tons; alpieste (birdseed) 455 tons; rye, 27,688 tons. The area sown was 397,834 hectares, proportioned as follows: Corn, 339,771; oats, 34,298; flax, 20,830; barley, 20,971; alpieste, 790; rye, 48.

The value of rural property of the Republic as given in the list of 1918 is 846,811,646 pesos, the number of estates being 69,205 with a total of 17,215,680 hectares.

Uruguay has some 2,500 wine producers. The area in vineyard was 15,240 acres in 1916 and 15,944 in 1917; grapes harvested aggregated 73,331,277 pounds in 1916 and 69,816,015 in 1917. After a period of fairly rapid development the wine industry has been more or less stationary during the past few years.

INDUSTRIES.

A South American agricultural and industrial exhibition was held at Montevideo from January 26 to February 9, 1919. The program included four main divisions, subdivided into a number of groups. Over 1,000 exhibitors attended, the majority of whom were Uruguayans. The exhibition was open to all South American countries, and numerous exhibits were received from Argentina and Brazil.

Uruguay is the country where shoes are the cheapest. This is due to the extensive use of machinery and the development of the Uruguayan tanning industry. Three-fourths of the leather used in local shoe factories is tanned in Uruguay and tanners are even exporting sole and patent leather.

The daily output of shoes at Montevideo is estimated at 10,000 pairs, worth from 18,000 to 20,000 pesos making an annual production of roughly 3,500,000 pairs worth. The daily output of each of the leading factories at Montevideo varies from 400 to 500 pairs.

The Uruguayan Institute of Fisheries recently inaugurated a cold storage and ice plant situated in one of the Montevideo port deposits.

The Compañía Argentina de Cemento Portland, principally owned in the United States, purchased the Uruguayan Portland Cement Works, and the lime quarries of Verdum, Province of

Minas. The purchase price exceeds \$1,000,000 gold. A new company has formed under Uruguayan laws, to be operated under the new management as of June 30, 1919.

An American company has recently established a refrigerator car service between its plant at Santa Ana do Livramento, Brazil, and its new cold-storage plant at the Montevideo docks.

The Uruguayan Government has presented to the Chambers a bill according to which 25 per cent. of the profits of State Industrial institutions would be distributed among the laborers of each of the institutions in question.

FOREIGN TRADE.

The foreign trade of the Republic during the first six months of 1919 was as follows: Customhouse value of imports, 18,317,112 pesos real value 70,591,905 pesos. Comparing these figures with those of the same period of 1918 shows an increase of 176,262 pesos in the customhouse value of the imports, and an increase of 317,079 pesos in the real value. The difference of the first half of the year in regard to the exports amounted to 17,072,831 pesos in comparison with the exports of 1918. The real value of the imports and exports of the first six months of 1919 shows a balance in favor of the trade of the country of 17,639,419 pesos.

Before the war imports of American merchandise into Uruguay were valued at \$5,453,157, or 12.17 per cent. of the total imports into that country. In 1915 the value had increased to \$7,270,986, or 20.79 per cent. of the total, in 1916 to \$8,906,517, or 25.24 per cent. and in 1917 to \$10,585,826, or 28.45 per cent.

Uruguay exported the following products to the United States in 1918:

Blood, dried, \$107,128; Bones, hoofs, and horns, unmanufactured, \$160,006.
Chemicals, drugs, dyes, and medicines, \$316,800; Coffee, \$24,856.
Feathers, etc., natural and artificial: Feathers and downs, crude, etc.—Ostrich, \$11,751; Fertilizers, \$138,506.
Furs, and manufactures of: Furs, and fur skins, undressed, \$35,022.
Grease, and oils, not elsewhere specified, \$32,858.
Hair and manufactures of: Unmanufactured, \$35,941; Hides and skins (except fur skins), raw or uncured, \$7,144,863; Hide cuttings, raw and other glue stock, \$82,653.
India rubber, etc.: Unmanufactured, \$33,520.
Leather and tanned skins, \$3,772.
Meat and dairy products, \$3,734,754.
Oils: Animal and fish, 20,287; Oleo stearin, \$178,136.
Wool, hair of the camel, goat, alpaca, and other like animals, and manufactures of: Unmanufactured—Wool of the sheep, hair of the camel, and other like animals, \$11,418,060.

Uruguay imported the following American products in 1918:

Abrasives, 12,426; Agricultural implements, and parts of, \$87,554; Asbestos, manufactures of, \$11,554; Asphaltum and manufactures of, \$1,724; Athletic and sporting goods, \$2,539.
Billiard tables and accessories, \$4,181; Blacking (including shoe paste, etc.), \$15,874; Brass and manufactures, \$38,014; Breadstuffs, \$12,247; Brushes, \$7,948; Buttons, and parts of, \$13,633.
Cars, automobiles, and other vehicles, \$1,439,930; Celluloid, and manufactures of, \$6,551; Cement, hydraulic, \$12,040; Chalk, \$3,082;

Chemicals, drugs, dyes, and medicines, \$779,099; Cloks and watches, and parts of, \$23,379; Coal and coke, \$629,965; Cocoa and chocolate \$7,610; Confectionary, \$7,532; Copper and manufactures, \$82,083; Cotton and manufactures, \$1,745,390.

Dental goods, \$36,958.
Earthen, stone, and china ware, \$8,174; Electrical machinery any appliances (except locomotives), \$949,029.

Fish, \$23,609; Fruits and nuts, \$50,926; Furniture of metal, \$13,282; Furs and fur skins, and manufactures of, \$9,295.

Glass and glassware, \$90,395; Glucose (corn sirup), \$45,981; Grease, \$11,232.

Hair, manufactures of, \$19,959; Hats, and materiales for, \$11,174; Hops, 25,005; Household and personal effects, \$8,482.

India rubber, manufactures of, \$307,599; Ink, printes, and other, \$18362; Instruments and apparatus, for scientific purposes, \$32,249; Iron and steel and manufactures, \$5,330,308.

Jewelry, \$10,716.
Lead and steel and manufactures, \$238,494; Leather and manufactures, \$347,455.

Malt, \$212,049; Meat and dairy products, \$21,806; Metal polish, \$1,681; Metals, metal compositions, not otherwise classified, \$24,106; Mucilage and paste, \$2,453; Musical instruments, \$73,291.

Naval stores, \$212,284; Notions, not otherwise classified, \$5,110. Oilcloth and linoleum, \$9,500; Oils, \$1,785,998.

Paper and manufactures, \$468,113; Paraffin and paraffin wax, \$125,231; Pencils and pencil leads, \$22,798; Perfumery and cosmetics, \$33,466; Phonographs, etc., \$42,115; Photographic goods, \$42,695; Plaster, builders' and common, \$588; Plated ware, (except cutlery and jewelry), \$117,764.

Roofing felt, and similar materials, \$4,727.
Seeds, \$16,053; Shoe findings, \$56,376; Silk, manufactures of, \$36,513; Silk, artificial, manufactures of, \$6,998; Soap, \$51,443;

Spirits, wines, malt liquors, and other beverages, \$16,202; Starch, \$3,301; Stone, and manufactures of, \$883; Sugar and molasses, \$1,494, 638; Sugical appliances (not including instruments), \$22,467; Suspenders and garters, \$20,994.

Tobacco, unmanufactured, \$20,586; Toys, \$18,438.
Umbrellas and parasols, \$4,461.

Vegetables, \$13,751; Vulcanized fiber and manufactures of, \$3,585.
Wood and manufactures, \$290,506; Wool and manufactures, \$107,330.

Zinc and manufactures, \$7,669.

SHIPMENTS BY PARCEL POST.

American firms making shipments to Uruguay by parcel post should bear in mind that in the case of goods for which no official valuation is found in the customs tariff the import duty, which with surtaxes, usually amounts to at least 45 per cent, is as a rule assessed on the sender's declaration of value. The declaration of a higher than the actual value sometimes made in the belief that it insures more careful handling of the parcel is an error which can only work to the disadvantage of the consignee.

Local importers not infrequently experience difficulty from the fact that American goods arrive by parcel post in packages which bear the retail selling price in the United States. All such price indications should be removed, inasmuch as it is difficult to convince customs inspectors that this is not the price paid by the importer. The declaration of value should show the net export price paid by the customer after deduction of all discounts, and this should be the only price or value appearing on the shipment.

The use of the metric system is more strictly enforced in Uruguay than in any other American country. This system was

adopted in 1862, and the Government wisely provided for courses of instruction in its use in business and official life as well as in schools, but it did not come into general use until made compulsory by a law of 1894, providing that fines should be imposed for the use of other systems.

Montevidean credit stands high. Many houses have open accounts with their European correspondents. Otherwise accepted bills against shipping documents are the rule. Such bills may run from 30 to 60 days, but six months are commonly asked for and granted when wholesale houses travel the country to distribute textile goods, hardware, drugs, and miscellaneous articles. In ordinary routine these up-country journeys are undertaken every three, four, or five months, the travellers also acting as collectors. Hence the need for credit by the importers. For expensive machinery quite long credits are sometimes granted. Only moderate interest is charged.

CUSTOM REGULATIONS.

No consular invoices are required for shipments to Uruguay, but a set of three bills of lading must be certified at the port of shipment. One copy of the bill of lading must be made out in Spanish, giving the port of shipment and destination, number and kind of packages, gross and net weights, cubic measurements, marks and numbers, total value in American money, and detailed description of the merchandise. A certificate of origin of merchandise for Uruguay must be presented in duplicate and certified by the consul. Both the original and copy of certificate of origin must be presented to the consul for certification, together with four copies of bill of lading, one of which must be in Spanish and three in English. The original certificate of origin is sent to the steamship company together with the four copies of bill of lading, after they have been duly legalized by the consul. The consul retains the copy of the certificate of origin. The certificate of origin must be filled either in Spanish or French, and must specify the kinds, numbers and quantity of packages or nationality of the goods, total value in American currency, and the ports of shipment and destination, transit, optional, etc. Declarations on the certificates of origin must be made out in black ink, or typewritten. Pencil will not be accepted, and these certificates must be without alteration, words or numbers crossed out or written between lines. Once legalized and stamped, the certificates of origin, as in the case of legalization of all other documents required for the shipment of goods and the clearance of vessels, its declaration cannot be corrected or altered. In case of mistakes, if found before sailing time, must be made known to the consul or vice-consul in order that same may be noted, or by letter in triplicate (if found after sailing time), which are legalized, the fee for legalizing being \$5.00. Stamps cannot be changed from one set to another. Three copies of the ship's manifest must be presented to the consul, and one of them must be in Spanish. All consignments must be specified with great particularity, and manifests must state the numbers of the bills of lading, the marks, numbers, quantities, nature, and contents of packages,

as well as their gross weight and measurement. The fee for consular certification of certificates of origin is 63 cents in the case of articles shipped on bill of lading, or parcel receipt and 25 cents in the case of goods sent by parcel post. Other fees for legalization of documents are:

For certification of bills of lading or parcel receipts with a value, \$1.25; for parcel receipt with no value, 25 cents; for certification of documents for shipments of petroleum, plants, or animals, each, \$2.50.

Uruguay has consulates in the following cities: Albany, N. Y.; Baltimore, Md.; Boston, Mass.; Brunswick, Ga.; Chicago, Ill.; Fernandina, Fla.; Galveston, Tex.; Jacksonville, Fla.; Kansas City, Mo.; Mobile, Ala.; New York, N. Y.; New Orleans, La.; Newport News, Va.; Norfolk, Va.; Pensacola, Fla.; Pascagoula, Miss.; Philadelphia, Pa.; Port Arthur, Tex.; Richmond, Va.; San Francisco, Cal.; Savannah, Ga.; Seattle, Wash.

By a law of April 7, 1919, the consular regulations were modified to the effect that every owner of merchandise shall be provided with a bill of lading, which may not contain lists of goods belonging to more than one shipper. In case the assignee be a maritime agent, a bank or banking agency, a customhouse clearing officer, commission agent, or other person who does not make a practice of selling goods, the merchandise will be considered to require as many invoices and bills of lading as customhouse transfers were involved in its shipment.

CUSTOM TARIFF.

The tariff system of Uruguay is nominally ad valorem, although the rates of duty are in most instances based on fixed official valuations instead of on the commercial or invoice value. The general rate of duty is 31 per cent, to which must be added various surtaxes, amounting in all to 14 per cent, the whole duty of 45 per cent being assessed as a rule on fixed official valuations. These valuations have not received general revision since 1912 and were estimated to be on an average about 80 per cent below the actual c. i. f. Montevideo value of imports in 1918. Many of the rates on finished articles are much higher than on the same goods lacking the final process, and the tendency of recent legislation is to protect Uruguayan industries. Exemption from import duties has been accorded to raw materials required by a considerable number of industries as well as certain agricultural implements and supplies. There are no preferential or conventional duties affecting the products of American exporters and their European competitors. Uruguayan custom laws impose heavy penalties for incorrect declarations of merchandise. Where the error discovered in the declaration is in favor of the importer, the penalties are confiscation of the excess, or a surtax of 50 per cent on duties. On the other hand, if customs inspection shows less merchandise than the declaration, the importer must pay full duties on the amount declared.

The Government recently issued a decree exempting from customs charges registered and unregistered packages containing

articles on the free list, even though these packages are intended for commercial purposes.

Beginning May 10, 1919, the Foreign Office of Uruguay is collecting the following consular fees on incoming postal parcels containing merchandise: 1 peso when the customs duties exceed 2 pesos, 0.20 peso when the customs duties do not exceed 2 pesos, and no fee when the contents are free of duty.

SHIPPING.

From the 1st of January to the 1st of March, 1919, 576 ships called at the port of Montevideo having a total tonnage of 1,493,056. Of these 517 were steamers with a tonnage of 1,457,161 and 59 sailing vessels with a tonnage of 35,895.

In the same period the movement of passengers through this port showed 46,171 entries, and 42,757 departures, making a difference of 3,414 in favor of the population.

FINANCE.

The fiscal year 1913-14 (July 1 to June 30) closed with the deficit about \$2,000,000; that of 1914-15 having been about \$960,000; and that of 1915-16 about \$3,200,000.

DEBT.

The outstanding foreign debt of Uruguay on January 1, 1919 was as follows, in Sterling pounds:—

New Consolidated Three and a half per cent. External debt, 1891 and 1896 £16,367,980; Five per cent. Loan of 1896, amount issued £934,400; Five per cent. Conversion Loan of 1905, £6,207,716; Five per cent. Public Works Loan of 1909, £1,203,992; Five per cent. Gold Bonds of 1914 (authorized issue, £2,000,000 reduced to £1,100,000) £1,072,360 Total outstanding £25,786,448.

In addition to the above, the Bonds of the City of Montevideo, issued in 1889, are in a direct obligation of the Republic.

In 1915, the Sinking Fund service was suspended by agreement. It was agreed later on, that the suspension of the Sinking Fund should be prolonged until one year after the close of the war, but in the case of the 3½ per cent. External Debt it was stipulated that if the Customs Revenues exceeded \$17,000,000 in any year, the surplus, up to 1 per cent. of the Debt, should be devoted to replacing the amounts unpaid during the period of such suspension.

The outstanding internal debt in Jan. 1, 1918, was as follows, in Uruguayan Money:—4% Guaranteed Debt, \$2,630,200; 4% Internal Unified Debt, \$1,448,650; 4% Liquidation Debt, \$202,875; 4% Amortisable Debt, Second Series, \$618,565; 5% Uruguayan Eastern Railway Guarantee Bonds, \$208,400; 5% Banco de Seguros del Estado Debt, \$2,921,200; 5% State Lands Bonds Redemption Debt, \$1,293,156; 5% Banco Hipotecario Certificates Amortisation Debt, \$714,270; 5% State Electric Works Debt, \$4,454,500; 6% Nationalisation of Port of Montevideo Debt, \$630,700; 6½% Internal 6½% Conversion Debt of 1916

\$14,906,700; 5% Colonisation Loan, \$500,000; Total \$30,529,216.

The city of Montevideo has outstanding an issue of 6 per cent. bonds of 1889. The cumulative sinking fund was suspended during the war.

A presidential decree of May 26, 1919, authorized the issue of bonds for the public works debt of 1918, amounting to 2,000,000 pesos. This issue will form an integral part of that debt, and will be divided into 1,800 bonds of 1,000 pesos denomination, and 2,000 bonds of 100 pesos denomination.

The President authorized the municipal economic administrative board to negotiate a loan of 100,000 pesos with the Bank of the Republic, to be used in the following works: Water pipes, 20,000; repairs to the public market 10,000; construction of a public highway and plaza, 30,000; rural road construction, 31,000; purchase and installation of storage yards at Battle y Ordoñez, 8,900; and the installation of a municipal laboratory, 1,000.

The Bank of the Republic was authorized in December 1918, to extend a credit to France on account current of \$15,000,000 gold. The loan will fall due at the expiration of two years from the date of its granting, will be renewable by mutual agreement, and bears interest at the annual rate of 5 per cent. The balance will be paid when due in gold coin.

On the same month the Bank of the Republic was authorized to extend the credit to the British Government agreed upon February 2, 1918, to \$20,000,000, gold. A part of this loan, and likewise a part of that conceded to France, will be employed in the purchase of cereals.

A similar agreement has been made with Italy.

BANKING.

Uruguay possesses a banking institution, entirely under State ownership. This is known as the Bank of the Republic (Banco de La Republica), and was established in 1896. Its original capitalization was 4,850,000 pesos, representing a large part of the proceeds of the 1,667,000 5 per cent external loan of 1896, which was sold in Europe at 71½. It was provided in the original charter that the bank should pay from its profits the 5 per cent interest and 1 per cent amortization on the loan each year, and that the balance should be appropriated, one-half to the Government, and one-half to the bank—to be added to its capital.

In 1914 the bank's charter was changed, and provisions were made whereby the entire net profits—less interest and amortization on the loan, and 50,000 pesos per annum to be used toward the construction of the Legislative Palace—were to be contributed to the bank.

The Bank of the Republic has a monopoly of the issuing of bank notes. Its charter authorizes the issue of bills of 10 pesos and larger denominations, payable at sight in gold, up to three times the amount of its paid-up capital, and smaller bills up to 50 per cent of the same capital.

The following are the other banks of Uruguay:

Banco Comercial. Established in 1857. Capital, paid up \$2,000,000. Reserve fund, \$700,000.

Banco de Seguros del Estado. State Insurance Bank. Capital, \$3,000,000. Reserve fund, \$257,632.

Banco Hipotecario del Uruguay. Established in 1887. Capital, \$3,000,000. Reserve fund, \$1,097,500. Branches at Mercedes and Paysandu.

Argentine-Uruguay Bank, capital 50,000,000 pesos, engaged in agriculture, stock raising, industrial, commercial, and co-operative building, etc. The president of the bank is Augusto J. Coelho, an Uruguayan citizen, and the vice-president is Dr. Norberto Pineiro, an Argentinian.

The following foreign banks maintain branches there: National City Bank of New York, London and River Plate Bank, British Bank of South America, London and Brazilian Bank, Anglo-South American Bank, Banco Italo-Belga, and Banco Español del Río de la Plata. The Montevideo branch of the National City Bank of New York was opened in August, 1915. Since the war the local branches of the Banco de Galicia y Buenos Aires and the Banco Frances del Río de la Plata have been closed.

A bank clearing house has now been organized at Montevideo and has been in operation since June 9, 1919. The clearing house includes 17 banking institutions, of which 9 are Uruguayan and 8 local branches of foreign banks.

CREDIT TERMS.

The generally recognized credit terms at Montevideo may be said, speaking broadly, to be 90 days from the time of the arrival of merchandise. Before the war many European houses were still more liberal and at present many local firms are compelled to meet terms which are far more exacting. In general, it would seem that at the present time most local importers of good standing are prepared to pay cash on the arrival of the goods, especially if afforded an opportunity to inspect the merchandise before taking up the draft. It is, however, believed that after a return to normal conditions some credit for cash in advance is agreed to only in exceptional cases and causes criticism.

MONEY.

The monetary standard of Uruguay is gold, the theoretical gold coin being the peso nacional, of 100 centésimos, equal to 1,034 gold. On June 23, 1862, a law was passed authorizing the coinage of the doblón, a 10-peso gold piece. As yet, however, only foreign gold is in circulation, foreign gold coins having a legal value established by the Government. The silver coins are of 1 peso, 50, 20, and 10 centésimos. Nickel coins are of 5, 2, and 1 centésimos.

The average stock of gold deposited in the several banks of the Republic during July 1919 amounted to 55,114,752 pesos, an increase of 5,495,076 pesos over the record of the previous month. Of this total, 46,369,500 pesos belong to the Bank of the

Republic and 8,745,252 pesos belong to private banks. By July 31, 1919, the stock had reached the amount of 59,442,000 pesos.

Notes in circulation in the Republic amounted to 52,554,645 pesos on the 31st of March, 1919.

RAILROAD.

The following are the most important railway lines, the mileage operated in the fiscal year 1918-19.

Central Uruguay Eastern Extension Railway, Ltd. Registered in London in 1889. Capital, \$9,000,000. Mileage, 311.

Central Uruguay Northern Extension Railway Co., Ltd. Registered in London in 1888. Capital, \$5,000,000. Mileage, 185.

Central Uruguay Railway Co. of Montevideo, Ltd. Registered in London in 1876. Authorized capital, \$22,500,000; issued, \$14,000,000. Mileage, 977.

Central Uruguay Western Extension Railway, Ltd. Registered in London in 1899. Nominal capital, \$4,312,500; issued, \$4,249,309. Mileage of concession, 211.

These four lines are under the same management.

Midland Uruguay Extension Railway Co., Ltd. Registered in London in 1911. Capital, \$500,000. Mileage, 35½.

Midland Uruguay Railway Co., Ltd. Registered in London in 1887. Capital, \$3,000,000. Mileage, 284.

North Eastern of Uruguay Railway Co., Ltd. Registered in London in 1886. Capital, \$4,000,000. Mileage, 76.

North Western of Uruguay Railway Co., Ltd. Registered in London in 1882. Authorized capital, \$7,050,000; issued, \$4,985,715. Mileage, 113.

Uruguay East Coast Railway Co. Registered in London in 1908. Capital, \$625,000. Mileage, 78.

Uruguay Northern Railway Co., Ltd. Registered in 1887. Capital, \$1,750,000.

United Electric Tramways of Montevideo, Ltd. Registered in London in 1904. Capital, \$2,500,000.

The profits of the railroad during the period from July, 1918, to March, 1919, inclusive, amounted to 7,463,780 pesos, distributed as follows: Central, 6,184,000; Noroeste, 270,590; Midland, 734,124; Norte, 89,648; Unidos, del Este, 185,417 pesos. For a like period of the previous year the amount was 6,373,713 pesos.

From July, 1918, to April, 1919, the railroad receipts amounted to \$8,374,332, or an increase of \$1,192,252 over the receipts for a like period of the previous year.

POSTS & TELEGRAPHS.

There are over 1,000 Post offices in Uruguay. The number of pieces handled is over 100,000,000.

The telegraph lines have a length of about 5,000 miles. They are all controlled by the government and handle over 1,000,000 messages per year.

A law of December 16, 1915 declared the postal, telegraph, and telephone services a State monopoly, and placed these services in the hands of the General Administration of Posts, Telegraphs, and Telephones. This institution, is governed by a council composed of the Director and Sub-Director of Posts, Telegraphs, and Telephones, and five other members. All five members of the council are named by the Government, two of them to be,

however, employees chosen from a list of 10 drawn up by the council.

By a resolution of June 12, 1919, the Uruguayan Ministry of Industries has authorized the Central & South American Telegraph Co. to bring into Montevideo one or two cables coming from Rio de Janeiro and Santos or from one of these cities. This company was authorized in September, 1918, to extend its telegraph and telephone lines from Buenos Aires to Montevideo. In authorizing the laying of cables, the Uruguayan Government assumes no responsibility or obligations and expressly states that the company shall have no claim for compensation or indemnity in the event the concession is subsequently withdrawn.

The Central and South American Cable Co's cable from Montevideo was landed at Rio on March 30, 1919.

The Department of Post Offices, Telegraphs, and Telephones of the Uruguayan Government, called for competitive bids for the installation of the new national system in the district of Montevideo. Bids are received on or before August 7, 1920, at said department, in Montevideo.

A British company, with its principal offices located in London, has organized an Aeroplane Navigation Service over the Pernambuco-Rio de la Plata route. This company has acquired land for the establishment of aerodromes and factories at Montevideo, Buenos Aires, Rio de Janeiro and Pernambuco.

The telephone companies, of which there are approximately 20, are now owned privately, but the Government intends to take them over, under its policy of declaring all public utilities to be State monopolies. There are approximately 18,000 instruments in use, of which 10,000 belong to the two companies operating in Montevideo. The larger of these, an English company, with 8,000 subscribers, uses American material.

The President was authorized by Congress to acquire the rights and titles to the railway and tramway of the north, or failing this the controlling interest in the company. The purchase was to be made by floating bonds paying 6 per cent with $\frac{1}{2}$ per cent amortization fund. The amount to be spent in the purchase was not to exceed 616,000 pesos.

PUBLIC WORKS.

The next few years will afford opportunities for the sale of many kinds of construction materials in Uruguay.

The biggest single project now being considered is a proposal for an international power plant to be erected on the Uruguay River by Argentina, Brazil, and Uruguay jointly, with guaranties for the equitable distribution of power to the three countries concerned. On the site being considered it is calculated that 2,500,000,000 kilowatt hours per annum could be developed, or an energy equivalent to that of 3,000,000 tons of coal. The project contemplates the construction of two dams, one movable and one fixed, with canals to the power plant. It will utilize a fall of 77 feet. The installation would also open for navigation 419 miles of river which today is inaccessible, and would permit the inundation of adjoining zones which are suitable for agriculture.

An official commission has prepared a plan for the irrigation of a 37,000-acre tract not far from Montevideo to serve as an experiment and example.

Fifteen cities of Uruguay are also to install water and sewerage plants within the next few years. The prewar estimates for this work totaled about \$15,000,000.

Within the next few years the Government will erect buildings to the value of \$23,000,000.

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PRINCIPAL DEALERS.

The following is a partial list of dealers in Montevideo, Uruguay:

Montevideo.

Books and Stationery.

Antonio Barreiro y Ramos, 25 de Mayo 355; Castro y Beltran, 18 de Julio 109; Morelli y Brignoli, 18 de Julio 109; Hnos. Comini, 18 de Julio 73; Jose A. Fontela, Mercedes y Andes; Hnos. Garcia, 26 de Mayo 260; Francisco Ibarra, Rincon 168; A. Monteverde y Co., 25 de Mayo 489; Francisco Oliveras, 18 de Julio 236 Luis y Manuel Perez, Sarandi, 240; Hnos. Rius, Soriano 155; A. Soury y Co., Ituzaingo 54; Francisco Vazquez Cores, 18 de Julio 34.

Machinery.

Kadisch y Alonso, Sierra 188; Eugenio Barht y Co., Uruguay 2; Ambrosio Beffolotti, Uruguay 62; Jose Flocchi y Co., Sarandi 183; Guillermo Campbell y Johnston, Bartolome Mitre 100; Pablo Mane y Co., Nueva York 37; Ernesto Quincke, Cerro Largo 90; D. Ratti y Co., 25 de Agosto 111; Hijos de Juan Rizzo, 25 de Mayo 375; Francisco Rocco y Co., Cerro Largo 68; Sala y Co., Piedras 567.

Notions.

Benigno Acevedo, Tacuarembó 217; Hipolito Anverscheidt, Ciudadela 158; Badtela y Co., Florida 86; Francisco Barilari, 18 de Julio 426; Cesar Brusoni, 18 de Julio 204; Maria B. de Garcia, Mitre 161; Ambrosio Gomez y Co., Rio Negro 123; Davila Hoz y Co., Rincon 215; Bado y Solabella, Rincon 284; Hnos. Juli, 25 de Mayo 149; Candido Maco y Co., 18 de Julio 432; Rosa Montanaro, 18 de Julio 522; Jose Nacelle, Rivera 195; Federico Ortiz y Goni, Misiones 77; Juan Quadri, 18 de Julio 86; Angel M. Sanz, Mercedes 95; Hnos. Staricco, 18 de Julio 35; Tedeschi y Co., 18 de Julio 160.

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VENEZUELA.

The northernmost part of the South American Continent, stretching in a northwesterly direction along the Atlantic Ocean and the Caribbean Sea is occupied by the United States of Venezuela. It is bounded on the land side by Colombia, Brazil and British Guiana. The country has an area of 393,976 square miles (1,020,396 square kilometers).

The population on December 31, 1917, was 2,848,121 inhabitants, or an increase during the year of 20,359, made of excess of births over deaths, 19,684, and the difference between the number of persons entering over the number departing.

The other principal cities and their populations are: Valencia, 64,861; Maracalbo, 48,490; Barquisimeto, 32,776; Ciudad Bolívar, 21,595; San Cristóbal, 20,759; Margarita Island, the seat of the pearl fisheries, has a population of 20,000.

GOVERNMENT.

Venezuela, officially termed the United States of Venezuela, is, in name at least, one of the five federal Republics of America.

The constitution now in force is that of June 13, 1914. The legislative authority is vested in a congress of two houses—the Senate and the Chamber of Deputies—the former consisting of 40 members elected by the Legislative Assemblies of the States for three years, 2 for each State, Venezuelans by birth and over 30 years of age; the latter composed of deputies chosen from each State by a direct vote and for three years, one deputy for each 35,000 inhabitants, and an additional deputy for each additional 15,000.

The Executive Power is vested in a President of the Republic, and a cabinet of seven ministers who act in conjunction with the President. The National Congress elects the President, for a term of seven years. He must be a Venezuelan by birth and over 30 years of age, and is eligible for reelection for the constitutional period immediately following that in which he holds office.

The Federal judiciary comprises the Supreme Federal and Cassation Court, the Supreme and Superior Tribunals; courts of first instance, district and municipal belonging to the States, the Federal District and Territories.

The President is General Juan Vicente Gomez, who was reelected May 3, 1915 for the period ending 1922, and has ruled Venezuela for many years, either personally or through acting Presidents.

A census of the population of the Federal District on January 1, 1920, shows a total of 137,687 residents in the entire district,

an increase of 26,913 over figures shown by the last census of 1891. The population of Caracas is given at 90,720, an increase of 18,291 in 29 years.

The President of the new Republic published a new alien law on June 24th, 1919. The principal provisions of the new act are as follows: Aliens shall enjoy the same civil rights as Venezuelan citizens with exceptions as provided by law. Aliens are divided into two classes, resident and transient. Aliens arriving in Venezuela shall present themselves within 15 days before the highest civil authority in their place of residence, to prove their identity, their intentions of settling in Venezuela, and the business or occupation in which they intend to engage. Aliens shall be subject to the same duties as citizens, but shall be exempt from military service and personal war taxes. Aliens shall observe strict neutrality in regard to Venezuelan national affairs; they shall not be permitted to become members of political associations, edit political publications, write on political subjects, or discourse publicly on this subject, and shall refrain from mixing even indirectly in the internal affairs of Venezuela. The alien who infringes this neutrality shall be considered a dangerous person and may be deported from the territory of the Republic. Aliens shall not hold public office, but the President may permit them to serve in the Charities, Public Health Service, or civil or military instruction. Aliens shall not have the right to take recourse to diplomatic means until all legal means have been exhausted and it is evident that justice has been defeated. Aliens shall have the right, like citizens, to indemnity from the Government for damage caused intentionally in times of war by legally constituted authorities acting in their official capacity. These claims shall be adjudged in accordance with proceedings established by national legislation for the proving and appraising of such claims and damages.

MINERAL RESOURCES.

There are fifteen gold mining companies, three copper companies, one asphalt mine, and 4 coal mines in operation. Copper and iron found in the Merida Moutai chain could be worked under favorable conditions. The most promising copper mines in this region are the Seboruco, near Alto de los Bueyes, on La Grita River, at an elevation of 1,000 meters above sea level. Pyrites of iron are found in large quantities at Jaji, and hematites abound in the vicinity of Varela. Lead, sulphur and coal are also found in this region, but are not at the present time exploited commercially.

Among Venezuela's iron deposits those of the Imataca region are especially important. They lie in the territory known as Delta (Orinoco on the Corosino), and by analysis these ores are shown to possess from 67 to 70 per cent. iron.

Venezuela is said to be rich in petroleum. The principal oil fields thus far located are: The Bella Vista, near Maracaibo; in the Mara district, near the Liman River asphalt lake; on the Sardinata River, which runs into Colombia; in the district of Colon, State of Zulia, south of Lake Maracaibo (largest field in

Venezuela); in the district of Sucre, on Lake Maracaibo; the Perija field, to the west of Lake Maracaibo; the Pedernales field in the delta of the Orinoco, where one of the river outlets empties into the Gulf of Paria.

There are in Venezuela several petroleum companies engaged in development work on an extensive scale—the Caribbean Petroleum Co., the Colon Development Co., the Venezuelan Oil Concessions (Ltd.), the Venezuela-Falcon Oil Syndicate (Ltd.), the Bermudez Co., and the Pauji Concession are the most important.

The General Asphalt Co., obtained on July 24, 1910, a concession for the oil rights in the vicinity of the lake, on the island of Pedernales, and on the peninsula of Paria. By June 1913, wells were being drilled in all of the 29 acres, but with not very favorable results.

On January 16, 1909, a concession was granted to Joaquin Briceno on 7.4 acres of land, 30 miles east of Lake Maracaibo. A company was formed in the city of Maracaibo with a large nominal capital but with only about \$50,000 for actual work. Development work is under way.

A resolution of the Venezuelan Minister of Development, published November 28, 1917, provided that: The Provisional President of the Republic direct that the petroleum and coal deposits in the States of Trujillo, Merida, and Zulia which are not already leased and which belong to no private parties or companies, shall be administered henceforth by the Federal Executive.

In another resolution of the same date announcement is made of the appointment of an Administrator of Mines for the district mentioned.

An Executive decree ordered the taking of a census of the petroleum and coal regions of the Republic.

The amount of petroleum produced in Venezuela increased from 18,248 tons in 1917 to 48,306 tons in 1918. This was all from three wells owned by one company in the Maracaibo district, the company's borings in eastern Venezuela having been without result.

The Venezuelan Government operates coal mines near Barcelona and near Coro. Production appears to be stationary at about 20,000 tons per annum. A large deposit of coal near Maracaibo is being developed by an American company, and there is a prospect that Venezuela may be a large exporter of coal within a few years.

ASPHALT.

The asphalt mines of Venezuela are among the richest and largest in the world. The mines are located in both the eastern and western section of the country; in the eastern there is a lake of asphalt with an area of a mile and a half and in the interior of the country there is Bermudez Lake, covering an area of over one thousand acres. There are as well, large quantities in the District of Pedernales and along the banks of Maracaibo Lake.

The General Asphalt Co., an American corporation, leased for 99 years, through its subsidiary, the New York & Bermudez Co.,

the celebrated Bermudez Pitch Lake, near Guanoco, and fee-simple titles to 11,861 acres of land underlying or surrounding the lake. The area covered by the pitch deposit is larger than the famous pitch lake of Trinidad, but the depth is said to be somewhat less.

PEARL FISHERIES.

During the season of 1919 the tax on pearl fishing amounted to 289,160 bolivares, or 91,570 more than in 1918. In the above-mentioned period 3,402 permits for dragnets were granted and 548 for divers. The value of the pearls exported in the season for seven months was between 6,000,000 and 7,000,000 bolivares. A number of pearls of the finest quality were found, two of them being sold for more than \$20,000 in the first sale.

A company has been organized by the name of the Caribbean Sea Co., with the object of exploiting the pearl fishing industry in the Isla de Margarita.

AGRICULTURAL PRODUCTION.

Coffee and cocoa are Venezuela's two great staples. No statistics of production are collected, the statements of exports being the only reliable data.

Sugar, corn (or maize), beans, peas, and onions are being exported in greater quantities than ever before. Cultivation of the castor-oil plant attracted increased attention. Production of tobacco has increased considerably. One large sisal plantation near Coro had reached the productive stage. The agricultural experiment station near Caracas, under the direction of Mr. Henry F. Pittier, of the United States Department of Agriculture, has distributed quantities of seed rice, castor-oil seed, and cotton seed, and has published booklets upon the cultivation of castor beans and cotton. There seems to be excellent opportunities in Venezuela for the investment of American capital in agricultural enterprises on a large scale.

The area planted in coffee amounts to more than 250,000 acres, and is produced for the most part in the northern part of the Republic. Venezuelan coffee, on account of its aroma and quality, is in great demand in foreign markets.

During 1917, 491,750 kilos of coconuts and 41,332 kilos of copra were shipped from Venezuelan ports and in addition many of the coconuts produced on the Venezuelan side of the Gulf of Paria were exported to Trinidad. Copra made in Venezuela is practically all sun dried.

A decree passed by the Venezuelan Government regulates the granting of timber concessions in Venezuela.

On June 27, 1919, a law was published by virtue of which forests located in unclaimed regions are considered national property, and springs or other sources of water are to be protected and preserved. Such mountains are inalienable. All lakes, rivers, creeks, and springs located in unclaimed and public lands are regarded as the property of the state.

INDUSTRIES.

There are several sawmills and lumber factories all using native woods; and tanning factories where an excellent quality of leather is prepared. A good beer is prepared by breweries in various parts of the Republic. Two paper factories have proved commercially profitable. A good quality cotton cloth and many finished articles of clothing have been produced from the mills of Valencia, Caracas, and Cumana. A factory for the extraction of coconut oil and cocoa butter was recently established in Cumana, and the exportation of these products has already taken place.

There is a cordage factory in Caracas known as the Fabrica Nacional de Fibras y Cordeles. Rope is also manufactured by hand of local materials in Cumana, Margarita, and Maracaibo.

The "Manufacturera de Vidrio y Cristal," a glass factory in Caracas, manufactures about 12,000 bottles per month, it has bought the ground of Maiquetia, a suburb of La Guaira, on which to erect a new factory to be devoted entirely to the manufacture of bottles. It is expected that this factory will enable the company to supply the entire demand for bottles in Venezuela.

The only Venezuelan packing plant for the preparation of chilled meats is located at Puerto Cabello and belongs to an English syndicate.

For many years the production of sugar in Venezuela was limited to the manufacture of raw sugar for domestic consumption. In 1916 the raw sugar exported from Maracaibo amounted to 3,500,000 pounds, or about double the quantity exported in 1915. In 1914 the sugar industry of Venezuela was further developed by the establishment of a number of sugar centrals near Lakes Maracaibo and Valencia. Sugar from these centrals is about 97 per cent. pure and is exported to the United States. It is claimed that Venezuela produces more cane to the acre than any other sugar-cane-producing country.

FOREIGN TRADE.

The figures of foreign commerce for ten years, are as follows, in Venezuelan bolivares:

Year	Exports including gold bullion.	Imports including gold coin.
1909	83,049,923	50,601,978
1910	92,997,777	64,184,207
1911	117,497,180	95,310,108
1912	130,885,534	106,574,817
1913	152,765,749	93,420,286
1914	111,505,355	72,473,913
1915	121,266,459	69,793,970
1916	117,652,854	106,914,089
1917	120,024,361	114,964,886
1918	102,659,153	77,244,950

Venezuela exported to the United States the following products in 1918:

Asphaltum and bitumen, \$255,510.
 Bones, hoofs, and horns, unmanufactured, \$7,132; Breadstuffs, \$612,129.
 Chemicals, drugs, dyes, and medicines, \$275,557; Cocoa, or cacao, crude, \$2,391,358; Cocoa and chocolate, prepared, etc. (not including confectionery), \$1,703; Coffee, \$5,351,110; Copper, in ore, \$784,681; Copper, and manufactures of: Old, and clippings, etc., \$10,980.
 Dyewoods, in a crude state, \$31,154.
 Fertilizers, \$207,498; Fibers, vegetable, and textile grasses and manufactures of not elsewhere specified; All other, \$8,985; Fish sounds, \$34,200; Fruits and nuts, \$9,874; Furs and fur skins, undressed, \$23.
 Hats, bonnets, and hoods, and materials for: Hats, bonnets, and hoods, of straw, chip, etc., \$2,854; Hides and skins, \$1,664,389; Hide cuttings, raw, and other glue stock, \$864.
 India rubber, gutta-percha, etc., unmanufactured, \$393,813; Iron and steel, and manufactures of, \$2,051; Ivory, vegetable (Tagua nuts), \$16,962.
 Oil cake, \$76,323; Oils: Vegetables expressed-Coconut oil, \$14,106.
 Photographic goods: Motion-picture films-Positives, \$2,500; Plants, trees, shrubs, and vines, \$3,446; Platinum, unmanufactured, \$12,960; Precious and semiprecious stones, and imitations of: Pearls, and parts of not strung, etc., \$1,373.
 Seeds: Castor beans or seeds, \$41,082; Sugar and molasses, \$881,811.
 Tobacco, \$24,712.
 Vegetables, \$45,703.
 Wood, \$8,120; Wool, etc., and manufactures of, \$2,433.

The following American products were imported in 1918:

Abrasives, \$4,635; Agricultural implements, \$125,938; Aluminum, and manufactures of, \$5,502; Animals, \$10,361; Asbestos, manufactures of, \$9,163; Athletic and sporting goods, \$7,314.
 Blacking (including shoe paste), \$5,498; Brass and manufactures, \$24,622; Breadstuffs, \$395,813; Bronze, \$7,393; Brushes, \$12,703; Buttons, and parts of, \$12,974.
 Candles, \$3,931; Cars, automobiles and other vehicles, \$227,048; Celluloid, and manufactures of, \$12,218; Cement, hydraulic, \$51,599; Chemicals, drugs, dyes, and medicines, \$768,278; Clocks and watches, and parts of, \$5,480; Coal and coke, \$13,275; Confectionery, \$1,580; Copper and manufactures, \$32,046; Cotton and manufactures, \$1,012,670.
 Dental goods, teeth and other, \$5,264.
 Earthen, stone, and china ware, \$36,180; Electrical machinery, and appliances (except locomotives), \$238,724; Explosives, \$30,403.
 Fibers, vegetable, manufactures of, \$151,577; Fish, \$54,755; Flavoring extracts and fruit juice, \$10,043; Fruits, \$30,793; Furniture of metal, \$6,257.
 Glass and glassware, \$113,231; Gold and silver, and manufactures of (including jewelry), 7,025; Grease, \$22,163.
 Hops, \$3,966; Household and personal effects, \$6,372.
 India rubber and manufactures, \$162,054; Ink, printers', and other, \$8,508; Instruments and apparatus for scientific purposes, \$5,812; Iron and steel and manufactures, \$1,431,949.
 Lamps, etc., (except electric), \$152,079; Lead, manufactures of, \$16,122; Leather and manufactures, \$320,566.
 Malt, \$25,600; Meat and dairy products, \$289,872; Metal polish, \$649; Motor boats, \$4,060; Musical instruments, \$41,583.
 Naval stores, \$50,559; Nickel, manufactures of \$627; Notions, not otherwise classified, \$10,570.
 Oakum, \$7,705; Oilcloth and linoleum, \$9,650; Oils, \$420,180.
 Paints, pigments, colors, and varnished, \$95,243; Paper and manufactures, \$305,924; Paraffin and paraffin wax, \$274,441; Pencils, and pencil leads, \$10,196; Perfumery, cosmetics, and all toilet preparations, \$41,824; Phonographs, graphophones, gramophones, etc.,

\$18,238; Photographic goods, \$16,606; Plated ware (except cutlery and jewelry), \$20,894; Plumbago or graphite, \$1,846.
 Roofing felt and similar materials, \$7,312.
 Seeds, \$9,087; Shoe findings, \$10,192; Silk, manufactures of, \$5,465; Soap, \$41,683; Spices, \$8,081; Spirits, wines, liquors, and other beverages, \$19,600; Stearin, vegetable, \$12,350; Stone and manufacture of, \$3,934; Straw and palm leaf, manufactures of, \$2,416; Surgical appliances (not including instruments), \$6,144.
 Toys, \$25,084; Type, \$1,688.
 Vegetables \$35,277.
 Wax, manufactures of, \$1,262; Wood and manufactures, \$170,237;
 Wool, manufactures of, \$14,814.
 Zinc and manufactures, \$6,889.

CUSTOM REGULATIONS.

The strict fulfillment of the following requirements will assure the exporters of good service and protection of their interests:

Four copies of the consular invoice must be presented for certification at the consulate. The invoice to contain:

Name of shipper.—Name of consignee.—Port of shipment.—Port of destination.—Class and nationality of boat.—Name of boat.—Name of captain. (The true name of the captain must be obtained, otherwise a fine, of Bs. 50, may be imposed. The names of captains are published in an official circular to all the custom houses therefore errors can be easily detected.)—Mark, number and kind of each package.—Contents.—Weight (exact weight in kilograms).—Value (absolutely true).—Abbreviations must not be used.—Quotation marks must not be used (").—Idems must not be used (idem).—Dittos must not be used (dittos).—Braces must not be used ().—Lines must not be left blank in the text of the consular invoice; and the last value of the invoice must be closed with a double line, drawing diagonal lines through the space remaining unused.

Omission of requirements Nos. 1 to 7 calls for a fine of 50 bolivares.

Violation of requirements 8 to 10, and 12 to 16, calls for a fine of 125 bolivares.

In respect to requirement No. 11, regarding value (absolutely true), clause 5 of article 207, Treasure Code (Section 2, law 12) says: "When the consul proves that the price declared in the invoice is less than that of the merchandise, duties occasioned by such merchandise will be charged according to the percentage of the difference between the value of the invoice and that justified by the consul," without prejudice to other fines which may be imposed by the Fiscal de Estampillas and to the Ley de Comiso (law of confiscation) applying to merchandise which pays duty ad valorem.

If the shippers are not acquainted with the Spanish language, the consular official must translate the invoice, making three extra copies of the translation. When the original invoice does not exceed 30 handwritten lines, the charge is \$3 gold for the four copies of the translation, a charge of 3c being made for each additional line. Packages with different marks may be included in one invoice. Consular invoices should be presented for certification not later than three hours before the sailing of the vessels so that the consul may have sufficient time for their examination and for insertion of the required data. Bills of lading do not require certification, but, if presented, five copies will be

certified by the consul without charge, a charge being made should more than five copies be desired. It is not permissible to consign goods "to order," and a penalty of from 750 to 2,—bolivares (\$150 to \$400) is imposed on the captain of a vessel carrying such shipments, which are also subject to a surtax of 25 per cent. of the duty. All shipments of foodstuffs should bear a Government stamp of inspection or be acquainted by a sworn statement that the goods have been inspected by competent authority. Fees for consular documents are as follows: For invoices up to \$100 value, \$3.75; from 100.01 to \$200, \$5; from \$200.01 to \$800, \$7.50; for each additional \$200 or fraction thereof, \$1.25; extra copies of invoice, each \$1; if an invoice contains more than one mark, there is an extra charge of 20 per cent. of the fees for each additional mark. Invoice blanks cost 35 cents per sets of four. More than five copies of bills of lading, each \$1.

The requirements for the importation of merchandise into Venezuela by parcel post are set out in a decree of September 26, 1918. All articles not excluded from importation may be imported by parcel post and will be subject to the same rates of duty as if imported by freight. When articles subject to different rates of duty are contained in the same package each will be dutiable separately at the respective rates, but with the proviso that duty shall be based on a minimum weight of 100 grams for each article. Wrapping such as cloth, straw, and paper used for outer covering will be dutiable at the rate of 0.25 bolivar per kilo, plus surtaxes, or \$0.0343 per pound, when the contents will be classified according to the articles. Bottles, boxes, and similar containers are dutiable at the same rates as the contents.

Venezuela has consulates in the following cities of the United States: Chicago, Ill.; New Orleans, La.; New York, N. Y.; Philadelphia, Pa.; San Francisco, Cal.; St. Louis, Mo.; Mobile, Ala.; Norfolk, Va.; New Port News, Va.; Seattle, Wash.; Jacksonville, Fla.; Mobile, Ala.

By a decree dated March 29, 1919, a consulate general of Venezuela has been created in New Orleans, with jurisdiction over the States of Louisiana, Mississippi, Alabama, Georgia, Texas, Arkansas, Oklahoma, Kansas, Missouri, Iowa, Nebraska, Tennessee, Kentucky, West Virginia, and Ohio. The consulate general at New York is given jurisdiction over the other States and Territories of the United States.

SHIPPING.

In the second half of 1918 the movement of vessels to and from Venezuelan ports was: One hundred and fifty-nine steamers entered with 251,054 tons displacement, and 218 sailing vessels with 10,294 tons; and 205 steamers sailed with 253,913 tons, and 968 sailing vessels put out to sea with 31,982 tons.

The Italian Steamship Co. La Veloce has established a line of steamers between Italian and Spanish ports, and Venezuelan and South American ports on the Pacific. It is a passenger and freight service.

The Italian Transatlantic Co. has also established a line of freight steamers to the same ports.

The Caribbean Steamship Co. (Ltd.), has recently established a new line of steamships between New York and Puerto Cabello and Maracaibo. One of the company's ships a short time ago weighed anchor in Maracaibo with a cargo of 11,338 sacks of coffee, the largest amount which ever has been embarked on one vessel in the history of shipping in that port.

Negotiations for the establishment of a new line of steamers from Chilean and Colombian to Venezuelan ports are rapidly assuming a definite form.

A steamship service, passenger and freight, between Goteborg, Sweden, and Venezuelan ports has been inaugurated by the Hugo Persson & Co. Line, which has diverted the steamer Thorbjorn, of 2,150 tons, to that particular field.

FINANCE.

The national budget of public receipts and expenses for the year beginning July 1, 1919, and ending June 30, 1920 estimated the receipts for the year at 49, 153,000 bolívares and fixes the expenditures at the same figure, divided as follows: Department of Interior, 10,981,632; foreign relations, 1,327,032; treasury, 14,109,273; war and navy, 9,000,000; promotion, 4,263,288; public works, 6,193,800; public instruction, 2,791,548; appropriation for budget deficiencies, 486,428 bolívares. The principal sources of revenue as given in the budget are as follows: Import taxes, 10,500,000 bolívares; tax on cigarettes, 7,980,000; liquor tax, 6,750,000; salt tax, 6,500,000; stamp tax, 4,000,000; foreign debt surtax of 30 per cent, 3,300,000; national tax of 12½ per cent, 1,375,000; land tax of 12½ per cent, 1,375,000, etc.

DEBT.

On January 1, 1919, the public debt of Venezuela amounted to 145,527,628 bolívares, distributed as follows: Internal consolidated debt of 3 per cent, 46,623,077 bolívares; recorded debt, 2,098,652; treasury bonds, 349,102; debt due under international conventions (known as diplomatic debt), 96,456,797. Since by December 31, 1917, the population of the Republic was 2,844,618, the quota of every citizen in the public debt is slightly under 51.16 bolívares, or about \$10, considering the increase in population in 1918.

In complete and final adjustment of the Franco-Venezuelan protocol of February 11, 1913, on October 1, 1919, the Venezuelan Government paid 57,692 bolívares, the last monthly payment on the diplomatic debt of 3,000,000 bolívares. According to the terms of the protocol French claims originating in causes prior to June 30, 1903, were estimated at this figure.

BANKING.

The Bank of Venezuela has a capital of 12,000,000 bolívares. Its headquarters are at Caracas, and it maintains agencies at La Guaria, Puerto Cabello, Valencia, Maracaibo, Barcelona, and nine other cities and towns. It acts officially for the Government ex-

cept in Caracas. The bank was founded March 24, 1882, as the Banco Comercial, its title being changed in 1890. The issue of bank notes has never exceeded 2,000,000 bolivares.

The Bank of Caracas is capitalized at 6,000,000 bolivares. Its headquarters are in Caracas, and a number of branches are maintained.

The Bank of Maracaibo is a local institution. Was organized in 1882, with a capital of 1,250,000 bolivares.

The Royal Bank of Canada was the first foreign bank to establish itself in Venezuela. It opened in Caracas in October, 1916, and has since established branches in several towns.

Under Venezuelan law, any foreign bank properly chartered under the laws of its country can come to Venezuela and do business, provided a certificate as to its charter is produced, together with a copy of the bank act of the chartering country.

These must be duly registered in accordance with local law. To become banks of issue, banks must submit to a greater degree of Government control and supervision. None of the foreign banks are at present authorized to issue notes.

MONEY.

The official monetary unit is the Bolivar, which corresponds to the franc. It is divided into 100 centimos (nominally, .20 cents, American money; normal exchange, 0.193).

The bank notes in circulation are as follows: 1,000 bolivars; 500 bolivars; 400 bolivars; 100 bolivars; 50 bolivars; 20 bolivars; and 10 bolivars.

Gold coins are the old Spanish onza (80 bolivars) and 20 bolivars. Silver coins are 5-bolivar pieces, commonly called fuerte 2½ bolivars; 2 bolivars; 1 bolivar; ½ bolivar, called a real and ¼ bolivar, called a medio. Nickel coins are 0.125 bolivar, commonly called a cuartillo or a locha and 0.05 bolivar, called a centavo.

The Bank of Venezuela estimated the available gold in the country on the 1st of January 1919 at 62,528,056 bolivares as against 30,340,822 bolivares on December 31 of 1915, showing an increase of 32,187,234 bolivares in three years.

In accordance with the law enacted by Congress in June, 1918, the President ordered the coinage of silver, in pieces of 5, 2, 1, 0.50, and 0.25 bolivares, representing a total value of 5,300,000 bolivares.

TRANSPORTATION.

There are 70 navigable rivers in Venezuela, which form important means of communication and transportation, with a total navigable length of 6,000 miles of which nearly 4,000 miles is furnished by the Orinoco, the third largest river in South America, with its tributaries.

One of the longest lines in the Republic is the Great Railway of Venezuela, 111 miles in extent.

Other lines are:

Bolívar Railway Co., Ltd. (Includes the South-Western of Venezuela.) Registered in London in 1896. Capital, \$5,000,000. Mileage 110.
 La Guaira and Caracas Railway Co., Ltd. Registered in London 1882. Capital, \$1,750,000. Mileage, 23.
 Puerto Cabello and Valencia Railway Co., Ltd. Registered in London in 1885. Capital, \$2,300,000. Mileage, 34.
 Venezuela Central Railway Co., Ltd. Registered in London in 1905. Capital, \$1,000,000. Operates 46 miles.
 United Electric Tramways of Caracas, Ltd. Venezuela. Registered in London in 1906. Capital, authorized, \$1,000,000 (U. S.); issued, \$850,000.

FOREIGN INVESTMENTS.

An estimate made in the year 1916 indicated that British investments in Venezuela amounted to approximately \$39,905,300 United States currency. This included large holdings in Government external bonds, shares and debentures in four railways (the La Guaira Caracas Railway, the Puerto Cabello-Valencia Railway, the Bolívar Railway, and the Central Railway of Venezuela), interests in public-utility enterprises at Caracas, the National Match Factory, certain petroleum undertakings, etc.

A fair amount of American capital has found its way to Venezuela. The interests of the General Asphalt Co. are large, the Caribbean Petroleum Co. and other American interests are important factors in the oil development of the Republic, and there are sugar enterprises financed in the United States. American banks have recently entered the field. The location of the Republic geographically is favorable to closer financial intercourse with the United States.

German interests hold a number of Government bonds, control the Great Railway of Venezuela, running from Valencia to Caracas, and a few minor undertakings.

France has from time to time controlled mining enterprises of more or less importance and has been interested in balata and rubber enterprises. The La Ceiba Railway, a local line of some importance, was constructed by French engineers.

PRINCIPAL DEALERS.

The following is a partial list of dealers in imported goods in Venezuela.

CARACAS.

Men's Furnishings

Alvarez y Co., El Agulla, E. 4, número 8a.; N. Benacerraf, E. 4, Nro. 29, Chorro o Coliseo 8a.; Juan Castillo y Co., E. 2, 49, Dr. Paul a Salvador de Leon; Guaría y Co., Suc. S. 4, no. 26, Padre Sierra o Bolsa; Elias J. Ettedgui, La Sirena, S. 4, no. 24, Bolsa o Mercaderes; Alejandro Feo, S. 2, no. 1; R. A. Lander G., Escocia, Av. S. 13, Gradillas o Sociedad; Alfonso Navarro y Co., S. 2, no. 11, San Francisco o Pajaritos; Eduardo L. Pardo y Co., Av. S. no. 9, Gradillas o Sociedad.

Importers and Exporters.

V. Alvarez Michaud y Co., Sur 1, num. 95; Argonet e hijo, Sur 4, num. 29; J. N. Arocha y Co., Oeste 4, num. 4; Pedro R. Bastardo, Norte 4, num. 33; Hnos Benarroch, Este 4, num. 35; I. H. Bendelac y Co., Este 2, num. 8; Bentata y Bendrihan, Sur 3, numeros 17 y 19; Benzcri y Beumergui, Este 2, num. 15g.; Gradilla o San Jacinto; S. Bickart, Sur 4, num. 56; J. Boccardo y Co., Sur 1, num. 9, Madrices o San Jacinto.

Leather Goods.

J. Bocardo y Co., Catia numeros 9 y 11; Paul y Co., Orense 8, num. 9, Catia; Teneria Ratto, Este 16, núm. 121.

Druggists.

Manuel Antonio Abrahamz y Co., Sur 8, núm. 34; Santiago Alcántara, Oeste 3, núm. 7; Alvarez Michaud y Co., S. Oeste 14, núm. 67; P. R. Bastardo, Norte 4, núm. 33; Braum y Co., Norte 1, núm. 13, y Sur 2, núm. 47; Filidor Capriles, Sur 6, núm. 63; M. A. Carbonell, Sur 2, núm. 63; Castillo Rivas y Co., Av. Este núm. 55; Hnos. Deboin, Oeste 10, núm. 45; Luis Domínguez, Norte 5, núm. 55.

Hardware.

Dalkmeier Vera Leon y Co., Al Sol, E. 4, no. 12; De Sola Stok y Co., Av. S 38, Camejo o Santa Teresa; Guinand y Co., Av. S no. 12a.; Guinand Freres, Quincalla de S. Pablo, S 4, no. 39, Mercaderes o S. Pablo; Luria y De Sola, E 2, no. 4, Gradillas o S. Jacinto; B. Montes, S 1, no. 22, S. Jacinto o Traposos; Eduardo y Antonio Santana, A., E 4, no. 6, Sociedad o Traposos; Santana y Co., Suc., Av. S, no. 51, Sociedad o Camejo; Soto y Co., Av., S no. 19, Gradillas o Sociedad; Luis Tinoco, E 2, no. 6, Gradillas o San Jacinto.

Jewellers

T. B. Bottger, Sur 4, no. 48; Antonio Cachazo hijo, Av. Este no. 7; N. Cantizani, Victoria, Oeste 2, no. 12; El y Hnos., Sur 4, no. 44; J. M. Fuenmayor Nieves, Este 14, no. 82; Gathmann Herman, Sur 4, no. 36; B. R. Enriquez, Sur 2, no. 25; D. Lensl, Este 6, no. 33; Teodoro Lopez, Oeste 4, no. 10; E. Padula, La Esmeralda, Av. Sur 15.

Books and Stationery.

Carranza Rojas, Oeste 4, no. 10; J. P. Parodi, Av. Norte, Torre A. Vercosa 10; G. Puig Ros, Traposos del Chorro 13; Puig Ros y L. Parra Olmenar, Este no. 19.

Furniture.

Alvarez de Lugo, S 2, 35, Pajaritos a Palma; Enriquez Arvelo, Agencias Americanas, S 1, no. 31, Traposos o Colon; Pedro P. Ascanio O, E 4, no. 11, Sociedad a Traposos; Carlos Bertorelli, S 2, no. 19, San Francisco o Pajaritos; F. Cabrera O, E 4, no. 8, Sociedad a Traposos; Faeundo Crespo, N 7, no. 10, Plaza Macuro o Socorro; Hnos. Díaz Rodríguez, S 1, no. 19, San Jacinto a Traposos; Guillermo Fernandez de Arcilla, S 4, no. 34, Bolsa o Mercaderes; Carlos Ferraro O, S 1, no. 15, San Jacinto o Traposos.

Watches.

Tomas B. Bottger, La Diamena, S 4, no. 48, Bolsa a Mercaderes; Antonio Cachazo hijo, Av. E, no. 7, Torre a Madrices; N. Cantizani, Victoria, O 2, no. 14, Padre Sierra a Muñoz; Pascual D'Onofrio, E 4, no. 5, Sociedad o Traposos; El y Hnos., S 4, no. 44, Bolsa a Mercaderes; Didio Gamba, S 1, no. 15, S. Jacinto a Traposos; Segundo Gamba, E 8, no. 63, Zamuro a Pájaro; Hnos. Gathmann, S 4, no. 36, Bolsa a Mercaderes; Waldemar Gelhardt, O 4, no. 19, Bolsa a Pedrera; Roberto Hernandez, S 3, no. 114, Pinto a Gobernador.

Tailors.

Alfred Acosta, N 2, no. 14, Principal a Sta. Capilla; Alvarez y Co., El Agulla, E. 4, núm. 8, Sociedad a Traposos; Argouet e hijo, Al Nuevo Mundo, S 4, no. 19, Bolsa a Mercaderes; Carlos Belardi, El Siglo, Av., N 4, Torre a Vercosa; Lino Blanco y Co., S 4, no. 1, Conde a Padre Sierra; Domingo A. Blomintt, S 1, no. 15, San Jacinto a Traposos; Maximiliano Brito, S 4, no. 10, Conde a Padre Sierra; Cambone, Sucre, Noel, O. no. 4, Monjas a Padre Sierra; Eduardo

Casafias, O 8, no. 4, Sta. Teresa a Palma; Juan Castillo C., La Princesa, E 2, no. 49, Dr. Paul a Salvador de Leon.

Hats.

Esteban Ballesté, S 1, no. 6, Madrices a San Jacinto; Domingo Blanco, Venezuela, B 2, no. 6, Gradillas a S. Jacinto; Juan Antonio Espinoza, S 3, no. 5, Marron a Dr. Paul; Adolfo Hernandez Silva, O 8, no. 19, Palma a San Pablo; Juan M. Jimenez, E 2, no. 11, Gradillas a San Jacinto; Hnos. Marquez, S 1, no. 17, San Jacinto a Traposos; Juan Bta. Mendible, S 1, no. 23, San Jacinto a Traposos; J. Musso, Paris, Av. S 7, Gradillas a Sociedad; Vicente Ochoa, Mi Penamá, S 3, no. 41, Chorro a Dr. Diaz; Perez y Dominguez, Av. S 15, Gradillas a Sociedad; José de Jesús Pinto, El Castillo, E 2, no. 12, Gradillas a S. Jacinto.

Shoes

Abudaram y Co., E 2, no. 31, San Jacinto a Dr. Paul; Domingo Blaise, Av. E, no. 194, Cruz a Alcabala; J. Boccardo y Co., S 1, no. 9, Madrice a San Jacinto; Eduardo N. Borges, S 8, no. 105, AgelMos a Jesús; Hnos. Carvajal, Av. E, 12, Torre a Madrices; O. H. Castillo, Av. E 23, Torre a Madrices; Filomena de Dechlone, E 12, 24; Agustín Esquivel, S 1, no. 12, Madrices a San Jacinto; Elias Ettedgui, La Shrena, S 4, no. 34, Bolsa a Mercaderes; Salomon E. Ettedgui, Luis 15, O 4, no. 2, Sociedad a San Francisco.

LA GUAIRA.

Custom Brokers.

E. Araanagua e hijo, Comercio 14-16; J. Boceardo y Co., Comercio 28; A. Dopou y Co., Bolivar 188; Federico Eraso, Bolivar 25; R. Escobar hijo, Bolivar 168; Kuipers Perret y Co., Bolivar 156; Hnos. Legoburu y Co., Comercio 22; Eduardo Marturet y Co., Bolivar 168; F. Winckelmann y Co., Comercio 11.

Exporters and Exporters.

Blohm y o., Comercio 35-37-39; Bocardo y Co., Comercio 28; H. L. Boulton y Co., Bolivar 180; M. A. Chirinos, Muchinga 3; A. Dupuoy y Co., Bolivar 188; F. Franchi, Bolivar; C. Galan y Co., Bolivar 31; C. Hellmund y Co., Bolivar 21; Montauban y Co., Bolivar 19; Odoardo y Hno., Comercio 133; L. Perez Diaz, Bolivar 57-59; Perret y Co., Bolivar 156; Bernardino M. Ruiz, Comercio 25; A. Urrutis, Bolivar 9; J. Villaro, Comercio 29.

Commission Merchants.

E. Aranaga hijo, Comercio 14-16; Baasch y Romer, Bolivar 175; F. G. Cortes, Bolivar 142; J. V. Cordero, Comercio 17-19; J. B. Gomez Villegas, Comercio 17-19; Venancio Gonzalez, Bolivar 106; D. Guevara B., Bolivar 194; E. Krogh, Bolivar 25; Perez y Morales, Bolivar 50; M. S. Plaza, Comercio 23.

Dry Goods.

Isaias Abraham, Bolivar 45; Hnos. Albo, Bolivar 39-81; Salomon Bencid, Bolivar 65; Cubria y Co., Comercio 38; L. M. Pabizon, Comercio 9; David Hairiche, Bolivar 55; M. Marazzani, Bolivar 248; Muskus y De Leon, Comercio 40.

VALENCIA.

Importers and Exporters.

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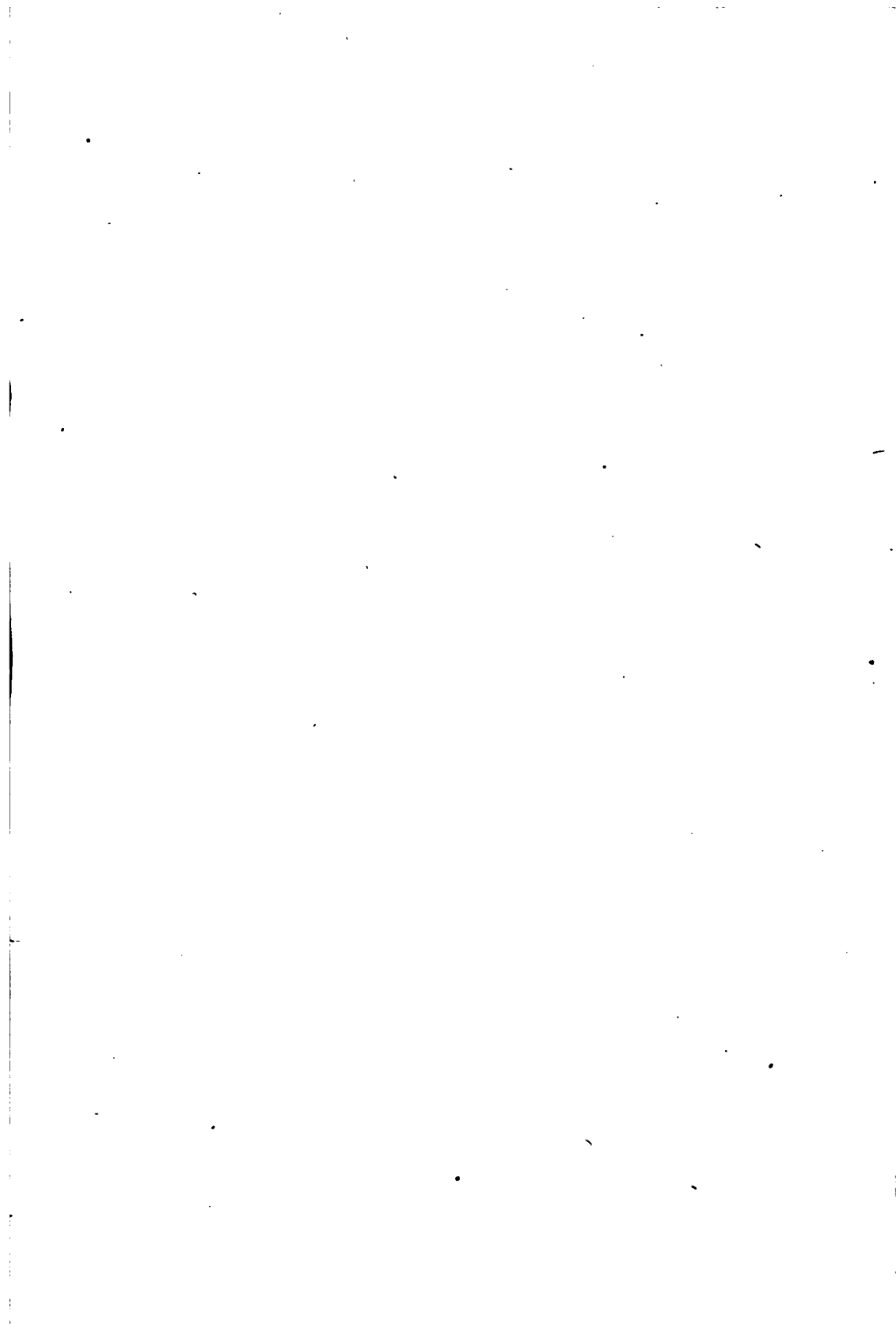
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